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FINAL SITE INVESTIGATION AND CHARACTERIZATION TECHNICAL REPORT FOR
AEROSPACE MUSEUM AND GROUNDS MAINTENANCE YARD NAS FORT WORTH TX
7/1/1996
LAW ENGINEERING AND ENVIRONMENTAL



**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
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INSTALLATION RESTORATION PROGRAM (IRP)
SITE INVESTIGATION/SITE CHARACTERIZATION TECHNICAL REPORT
FOR
THE AEROSPACE MUSEUM SITE AND GROUNDS MAINTENANCE YARD

Naval Air Station Fort Worth
Joint Reserve Base, Carswell Field
Fort Worth, Texas

July 1996

Final



PREPARED FOR

AIR FORCE BASE CONVERSION AGENCY (AFBCA/OL-H)
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE, CARSWELL FIELD
FORT WORTH, TEXAS 76127-5000

UNITED STATES AIR FORCE
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE (AFCEE/ERB)
BROOKS AIR FORCE BASE, TEXAS 78235-5363

CONTRACT NO.: F41624-94-D-8050

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FOR

**NAVAL AIR STATION FORT WORTH
JOINT RESERVE BASE, CARSWELL FIELD
FORT WORTH, TEXAS 76127-5000**

JULY 1996

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LIST OF ACRONYMS AND ABBREVIATIONS

AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AFP-4	Air Force Plant-4
AMS	Aerospace Museum Site
AOC	Area of Concern
CADD	computer aided design and drafting
DQO	data quality objectives
EB	equipment blank (rinsate)
EDD	Electronic Data Deliverable
GC	gas chromatography
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GMV	Grounds Maintenance Yard
gpd/ft	gallons per day per foot
gpm	gallons per minute
GWP	Soil-to-Ground Water Cross-Media Protection Concentration
ICP	inductively coupled plasma
IDL	instrument detection limit
IDW	investigation derived waste
IRP	Installation Restoration Program
LAW	Law Environmental, Inc.
LCS	laboratory control standards
LIMS	Laboratory Information Management System
MDL	method detection limit
MEK	methyl ethyl ketone (2-butanone)
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
MS	matrix spike

LIST OF ACRONYMS AND ABBREVIATIONS
(Continued)

MSC	Medium Specific Concentration
MSD	matrix spike duplicate
MSL	mean sea level
NAS Fort Worth	Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
NCP	National Contingency Plan
PAH	polynuclear aromatic hydrocarbon
PARCC	precision, accuracy, representativeness, completeness, comparability
PCB	polychlorinated biphenyls
POL	petroleum, oils and lubricants
PQL	practical quantitation limit
QA	quality assurance
QA/QC	quality assurance/quality control
QC	quality control
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
RSD	relative standard deviation
RT	retention time
SAI	Soil/Air and Ingestion Standard
SOP	standard operating procedures
SOW	Statement of Work
SWMU	solid waste management unit
TB	trip blank
TC	team chief
TNRCC	Texas Natural Resource Conservation Commission
USAF	United States Air Force

LIST OF ACRONYMS AND ABBREVIATIONS
(Continued)

USDA	U.S. Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
$\mu\text{g/L}$	micrograms per liter

EXECUTIVE SUMMARY

Law Environmental, Inc., (LAW) was contracted by the U.S. Air Force Center for Environmental Excellence (AFCEE) to perform a Site Investigation/Site Characterization at two sites at the Naval Air Station Fort Worth, Joint Reserve Base, Carswell Field (NAS Fort Worth). The two sites investigated were the Aerospace Museum Site and the Grounds Maintenance Yard. The primary objective of this investigation was to characterize the condition of site surface soils by collecting soil samples for laboratory analysis. Soils were analyzed for metals, volatile organics, and semi-volatile organics. In addition, samples from the Grounds Maintenance Yard were analyzed for pesticides/PCBs and chlorinated herbicides. The results were compared to Texas Natural Resource Conservation Commission (TNRCC) Risk Reduction Standards (TNRCC, 1993) and, for metals, background concentrations.

Soil samples collected at the Aerospace Museum Site contained metals, volatile organic, and semi-volatile organic constituents. Toluene and polynuclear aromatic hydrocarbons (PAHs) were detected throughout the site. Phthalates were also detected at low concentrations. All volatile and semi-volatile organic constituents were detected at concentrations less than the Texas Risk Reduction Standards.

Metals constituents at the Aerospace Museum Site were compared to site-specific background concentrations. However, the background data for metals collected during this investigation may not be representative of basewide background levels because the concentrations of some metals in background samples were relatively high compared to actual site concentrations. As a result, the findings for metals detected at the site are inconclusive.

Soils collected at the Grounds Maintenance Yard contained metals, volatile organics, semi-volatile organics, pesticides/PCBs, and chlorinated herbicides. Toluene and PAHs were detected throughout the site. Volatile constituents found at the site may be related to solvent use at the Maintenance Yard. All volatile and semi-volatile organic constituents were detected at

concentrations less than the Texas Risk Reduction Standards with the exception of bis(2-ethylhexyl)phthalate.

Concentrations of pesticides/PCBs and chlorinated herbicides detected at the site were less than the Texas Risk Reduction Standards with the exception of Arochlor 1254, 4,4'-DDT, 4,4'-DDE, and dieldrin.

Metals constituents at the Grounds Maintenance Yard were compared to site-specific background concentrations. However, the background data for metals collected during this investigation may not be representative of basewide background levels because the concentrations of some metals in background samples were relatively high compared to actual site concentrations. As a result, the findings for metals detected at the site are inconclusive.

Additional sampling is recommended at both sites to further delineate the horizontal and vertical extent of detected organic constituents. PCBs detected at the Grounds Maintenance Yard may pose a risk due to off-site migration via run-off from the site. LAW recommends containment of the run-off from the transformer storage area, and removal of the PCB source and contaminated soils.

In addition, LAW recommends that the metals data from this investigation be reevaluated based on basewide background concentrations of metals.

1.0 INTRODUCTION

Law Environmental, Inc., (LAW) was contracted by the U.S. Air Force (USAF) Center for Environmental Excellence (AFCEE) to perform an investigation and characterization for two sites at the Naval Air Station Fort Worth Joint Reserve Base, Carswell Field, Fort Worth, Texas (NAS Fort Worth). The sites were the Aerospace Museum Site and Grounds Maintenance Yard. The work was conducted in conjunction with the Installation Restoration Program (IRP). The purpose was to ascertain the presence or absence of contamination in surface soils from prior site activities and to recommend appropriate further action, as necessary.

Neither site is currently listed as a Solid Waste Management Unit (SWMU), although both are listed by the Texas Natural Resource Conservation Commission (TNRCC) as Areas of Concern.

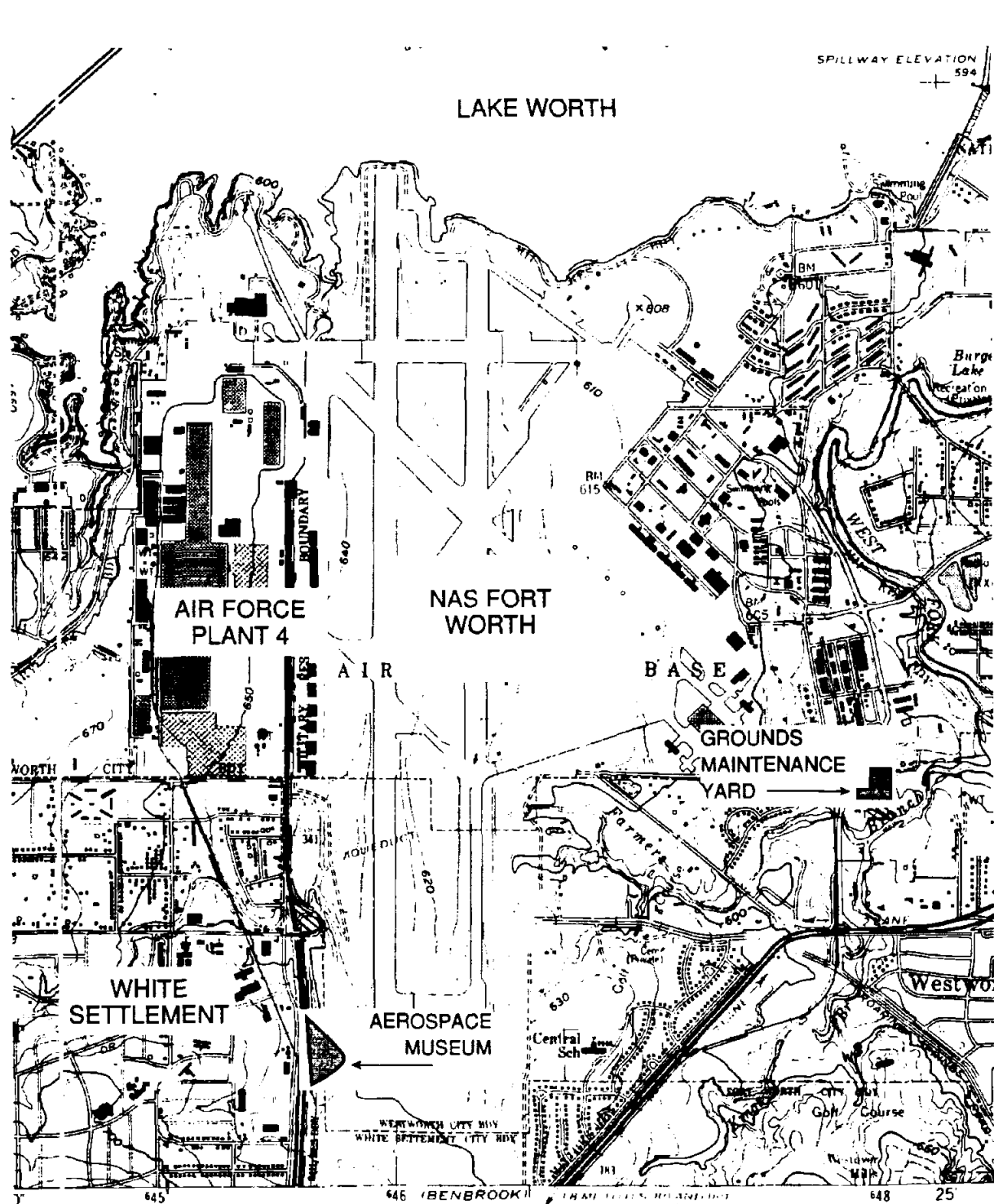
1.1 THE AIR FORCE INSTALLATION RESTORATION PROGRAM

The USAF IRP is designed to identify, confirm/quantify, and remediate problems caused by past management of hazardous wastes at Air Force facilities.

The objectives of the IRP program are to assess past hazardous waste disposal and spill sites at Air Force installations and to develop remedial actions consistent with the National Contingency Plan (NCP) for those sites which pose a threat to human health and welfare or to the environment. The sites studied under this investigation have been assigned the IRP Site ID's of OT38, Aerospace Museum Site, and OT39, Grounds Maintenance Yard.

1.2 INSTALLATION DESCRIPTION

NAS Fort Worth is located in Tarrant County, Texas, approximately 6 miles west of Fort Worth, Texas (Figure 1-1). The base covers approximately 25,000 acres and includes a flightline area; operations buildings; warehouses; petroleum, oils, and lubricants (POL) tank farm; and base housing. The base is bounded to the north by Lake Worth, to the west by Air



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH, JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE INVESTIGATION/SITE CHARACTERIZATION

SITE VICINITY MAP

Source: USGS Lake Worth, Texas Topographic Quadrangle, 1982
USGA Benbrook, Texas Topographic Quadrangle, 1981

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Force Plant 4, to the south by the community of White Settlement, and to the east by the West Fork of the Trinity River and the city limits of Fort Worth, Texas.

Carswell AFB began operations in 1942 and was operated by the Air Force as a Strategic Air Command Base. The base is currently undergoing realignment to become a joint reserve base.

The following discussion of the NAS Fort Worth environmental setting is derived primarily from the Installation Restoration Program Phase I Records Search Report (CH2M Hill, 1984). Information from that report is supplemented by information from the literature and from the general findings of studies conducted by the U.S. Army Corps of Engineers (USACE, 1991) and Radian Corporation (Radian, 1986; 1991).

1.2.1 Physiography

The majority of NAS Fort Worth is located within the Grand Prairie section of the Central Lowlands Physiographic Province. This area is characterized by broad terraces sloping gently to the east, divided by westward-facing escarpments. The land is typically grass covered and treeless, except for isolated stands of upland timber. The northwestern portion of NAS Fort Worth is within the Western Cross Timbers Physiographic Province which is characterized by rolling topography and a heavy growth of post and blackjack oaks. The land surface slopes gently northeast toward Lake Worth and east toward the West Fork of the Trinity River. Elevations range from a high of approximately 690 feet above mean sea level (msl) near the southwest corner of the installation to a low of approximately 550 feet above msl near the east side of the installation. The elevation of Lake Worth usually approximates the elevation of the dam spillway, 594 feet above msl.

1.2.2 Stratigraphy

The geology of NAS Fort Worth can be characterized as a blanket of Quaternary clastic units overlying Cretaceous bedrock. From youngest to oldest, the geologic units of interest are as follows:

- Quaternary Alluvium/Terrace Deposits
- Cretaceous Goodland Limestone
- Cretaceous Walnut Formation
- Cretaceous Paluxy Formation
- Cretaceous Glen Rose Formation
- Cretaceous Twin Mountains Formation

NAS Fort Worth is located on the relatively stable Texas shelf, west of the faulting associated with the Ouachita Structural Belt. No major faults or fracture zones have been mapped near the base. The regional dip of the rocks at NAS Fort Worth ranges from 35 and 40 feet per mile in an easterly to southeasterly direction.

1.2.3 Soils

The U.S. Department of Agriculture (USDA) Soil Conservation Service has identified four near-surface soil associations on or near NAS Fort Worth. The surficial soils of the installation are primarily nearly level to gently sloping clayey soils of the Sanger-Purves-Slidell and Aledo-Bolar-Sanger Associations. Less widely distributed are the clayey soils of the Frio-Trinity Association and the loamy soils of the Bastil-Silawa Association which occur on the floodplain and stream terraces of the West Fork of the Trinity River.

1.2.4 Ground Water

Five hydrogeologic units have been identified at NAS Fort Worth. These units, listed from most shallow to deepest, are as follows:

- An upper perched-water zone occupying the alluvial terrace deposits of the Trinity River
- An aquitard consisting of predominantly unsaturated limestone of the Goodland and Walnut Formations
- The Paluxy Aquifer
- An aquitard of relatively impermeable limestone in the Glen Rose Formation
- A major aquifer in the sandstone of the Twin Mountains Formation

Upper Zone - Perched ground water occurs in lenses within the coarse alluvial sand and gravel deposits along the Trinity River. These lenses are limited in lateral extent and are surrounded by low-permeability clays and silts. Ground water in the upper zone occurs at depths ranging from 7 to 13 feet. Annual ground-water table fluctuations are typically on the order of 5 feet (USGS, 1993). Recharge to the water-bearing deposits is from rainfall and infiltration in stream channels and drainage ditches.

In parts of Tarrant County near the Trinity River, the upper zone is developed for irrigation and residential use. The community of River Oaks, immediately east of NAS Fort Worth, formerly utilized supply wells developed in alluvial deposits at a location near the former Carswell AFB hospital. The wells were abandoned when Carswell AFB purchased the property for hospital construction. In general, ground water in the upper zone is not economical to develop due to the zone's limited distribution and susceptibility to surface/storm-water pollution.

Goodland/Walnut Aquitard - The perched water present in the alluvium is separated from the underlying aquifers by the low permeability limestone and shale of the Goodland Limestone and Walnut Formations. The aquitard consists of moist clay and shale layers interbedded with dry limestone beds. Although the Walnut Formation is primarily dry, drillers in the area have reported small amounts of water in the Walnut Formation, suggesting that ground water may move through the Walnut along bedding planes. A previous soil boring at Air Force Plant 4,

immediately west of NAS Fort Worth, indicated that the Goodland Limestone had been completely eroded and only 3 feet of the Walnut Formation was present. It has also been reported that the upper zone and Paluxy formation are in contact at the eastern boundary of Air Force Plant 4, where both the Goodland and Walnut formations have been removed by erosion. In areas of similar erosion, water in the upper zone could come in contact with water in the Paluxy aquifer.

Paluxy Aquifer - The Paluxy aquifer is the shallowest bedrock aquifer beneath NAS Fort Worth. Water in the Paluxy normally occurs under confined conditions beneath the Goodland/Walnut aquitard except where the aquitard is absent due to erosion. The Paluxy Formation is divided into upper and lower sand members and the aquifer is likewise divided into upper and lower aquifers. The upper sand is fine-grained and shaley while the lower sand is coarser; therefore, most wells are completed in the lower section.

The Paluxy aquifer is recharged along outcrops west of NAS Fort Worth. Paluxy outcroppings also occur north of the base in the bed of Lake Worth. The lake bed represents a significant recharge source for the aquifer and creates a localized potentiometric high. Regional ground-water flow within the Paluxy is eastward, parallel to regional dip. Ground-water flow at NAS Fort Worth is influenced by the Lake Worth potentiometric high and by a potentiometric low induced by ground-water withdrawals by the community of White Settlement. This produces a generally southeasterly flow direction.

Transmissivities in the Paluxy aquifer range from 1,263 to 13,808 gallons per day per foot (gpd/ft), with an average of 3,700 gpd/ft. In Tarrant County, the Paluxy Formation ranges in thickness from 140 to 190 feet, with an average thickness of 160 feet. The actual water-bearing thickness in the NAS Fort Worth area probably approximates the formation thickness, but the aquifer is separated into two distinct water-bearing zones. In the vicinity of NAS Fort Worth, permeabilities range from 13 to 140 gpd/ft² (based on an approximate thickness for the aquifer of 100 ft). Well yields from the Paluxy aquifer range from 10 to 480 gallons per minute (gpm) averaging approximately 100 gpm.

The Paluxy aquifer represents a significant source of potable ground water in the Fort Worth area. Communities adjacent to NAS Fort Worth, especially White Settlement, develop municipal water supplies from the Paluxy, as well as from the deeper Twin Mountains aquifer. As a result of extensive pumping, water levels in the Paluxy aquifer have declined significantly over the past several years. Water levels in the immediate NAS Fort Worth vicinity have not lowered to the same degree as in the Fort Worth area because the base does not produce water from the Paluxy.

Glen Rose Aquitard - Below the Paluxy Aquifer are the fine-grained limestone, shale, marl, and sandstone beds of the Glen Rose Formation. The thickness of the formation varies from 250 to 450 feet. Although the sands in the Glen Rose Formation yield small supplies to wells in Fort Worth and western Tarrant County, the relatively impermeable limestone behaves as an aquitard, restricting water movement between the overlying Paluxy aquifer and the underlying Twin Mountains aquifer.

Twin Mountains Aquifer - The Twin Mountains Formation is the oldest formation used for water supply in the NAS Fort Worth area. The formation consists of a basal conglomerate of chert and quartz, grading upward into coarse to fine grained sand interbedded with shale. The formation varies in thickness from 250 and 430 feet. The Twin Mountains aquifer is recharged along outcrops west of NAS Fort Worth. Water movement is eastward in the direction of regional dip. Like water in the Paluxy aquifer, the Twin Mountains aquifer occurs under unconfined conditions in the recharge area, becoming progressively more confined in the downdip direction.

The Twin Mountains aquifer is the principal aquifer in Tarrant County and yields large water supplies for municipal (including human consumptive) and industrial purposes. In Tarrant County, transmissivities in the Twin Mountains aquifer range from 1,950 to 29,700 gpd/ft, with an average of 8,450 gpd/ft. Permeabilities range from 8 to 165 gpd/ft², with an average of 68 gpd/ft².

Ground-water withdrawals from the Twin Mountains aquifer, primarily for municipal water supply, have resulted in declining water levels. Between 1955 and 1976, the potentiometric surface of the aquifer dropped approximately 250 feet. Water quality in the Twin Mountains aquifer is acceptable for potable use throughout the Fort Worth area.

1.2.5 Surface Water

NAS Fort Worth is located within the Trinity River Basin immediately south of Lake Worth, a man-made reservoir on the Trinity River. A portion of the installation is drained by Farmers Branch, which discharges into the West Fork of the Trinity River just south of the cantonment area. Farmers Branch begins near the community of White Settlement and flows eastward. Immediately south of Air Force Plant 4, Farmers Branch flows under the runway through two large culverts.

Most of the installation's surface drainage is diverted through a series of storm drains and culverts. The water is in turn directed to oil/water separators and discharged to the West Fork downstream of Lake Worth. A small portion of the north end of the installation drains directly into Lake Worth.

1.2.6 Climatology

NAS Fort Worth is located at approximately 33 degrees north latitude. The climate is humid subtropical with hot summers and dry winters. Tropical maritime air masses control the weather during much of the year; however, the passage of polar cold fronts and continental air masses create large variations in winter temperatures.

The average annual temperature for NAS Fort Worth is 66 degrees Fahrenheit and monthly mean temperatures vary from 45 degrees Fahrenheit in January to 86 degrees Fahrenheit in July (Table 1-1). The average daily minimum temperature in January is 35 degrees Fahrenheit and the lowest recorded temperature is 2 degrees Fahrenheit. The average daily maximum

TABLE 1-1

METEOROLOGICAL DATA SUMMARY
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
TEMPERATURE (°F)													
Mean	45	50	57	66	74	82	86	85	78	68	56	49	66
Average Daily Maximum	55	60	67	76	83	91	95	95	88	78	66	59	76
Average Daily Minimum	35	39	46	56	64	72	75	75	68	57	46	38	56
Highest Recorded	88	88	85	89	100	111	109	110	107	105	89	91	110
Lowest Recorded	2	6	11	31	42	55	61	60	46	33	17	11	2
PRECIPITATION (inches)													
Mean	1.7	1.9	2.1	3.9	4.2	3.1	2.5	2.1	3.6	3.1	1.8	1.9	31.9
Maximum Monthly	5.9	4.7	6.5	14.2	15.2	8.8	9.0	6.0	9.6	10.7	7.4	6.7	15.2
Minimum Monthly	0.1	0.1	(a)	0.8	0.8	0.1	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Maximum in 24 hours	2.8	3.2	3.4	3.3	5.7	3.5	5.9	3.1	4.0	3.2	2.8	2.9	5.9
Days with Thunderstorms	1	2	3	6	8	6	5	5	4	3	1	1	45
SNOWFALL (inches)													
Mean	2	1	6	0	0	0	0	0	0	0	(b)	(b)	3
Maximum Monthly	8	12	7	0	0	0	0	0	0	0	4	3	8
Maximum in 24 hours	5	8	7	0	0	0	0	0	0	0	4	3	8
RELATIVE HUMIDITY (%)													
Mean	62	61	61	64	68	64	58	60	65	65	63	62	63
SURFACE WINDS (knots)													
Mean	8	8	9	9	7	8	6	5	6	6	8	8	7
Maximum	50	63	69	64	68	65	56	54	80	45	54	58	80
Prevailing Direction	S	S	S	S	S	S	S	S	S	S	S	S	S

Source: United States Air Force, Carswell AFB, Texas. Period of Record: 1946-1978.

(a) = Less than 1/10 inch.

(b) = Less than 1 inch.

temperature in July and August is 95 degrees Fahrenheit and the highest temperature recorded at the base was 111 degrees in the month of June. On the average, freezing temperatures occur at NAS Fort Worth on 33 days per year.

Mean annual precipitation recorded at NAS Fort Worth is 32 inches. Typically the wettest month is May, with a secondary maximum in September. The period from November to March is generally dry with a secondary minimum in August. Snowfall accounts for a small percentage of the total precipitation between November and March, with an average, measurable snowfall of 3 inches per year. Lake evaporation at NAS Fort Worth is estimated to be approximately 57 inches per year. Evapotranspiration over land areas may be greater or less than lake evaporation depending on vegetative cover type and moisture availability. Average net precipitation is expected to be equal to the difference between average total precipitation and average lake evaporation, or approximately minus 25 inches per year.

Thunderstorm activity occurs at NAS Fort Worth an average of 45 days per year. The greatest number of these storms typically occurs between April and June. Hail may fall on two to three days per year. The maximum precipitation recorded in a 24-hour period is 5.9 inches.

Mean cloud cover averages 50 percent at NAS Fort Worth with clear weather occurring frequently during all months. Some fog is present on an average of 83 days per year. Wind speed averages 7 knots; however, a maximum of 80 knots has been recorded. Wind direction is predominantly from the south during all months.

1.3 SITE INVENTORY

The Aerospace Museum Site (AMS) is located along Spur 341, west of the North-South Primary/Instrument Runway, south of Air Force Plant 4 (AFP-4), and adjacent to the Farmers Branch of the West Fork Trinity River (Figure 1-2). The site currently is covered with grass and slopes gently from northwest to southeast.



(INDUSTRIAL AREA)

AUTOMOBILE BODY SHOP/JUNK YARD

WHITE SETTLEMENT ROAD

SPUR 341

AEROSPACE MUSEUM SITE


FARMERS BRANCH

BEGINNING
OF
AQUEDUCT

NO. 130 NORTH--SOUTH PRIMARY/INSTRUMENT RUNWAY

191

LEGEND:

 AREA OF AEROSPACE MUSEUM SITE



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

AEROSPACE MUSEUM SITE
VICINITY MAP

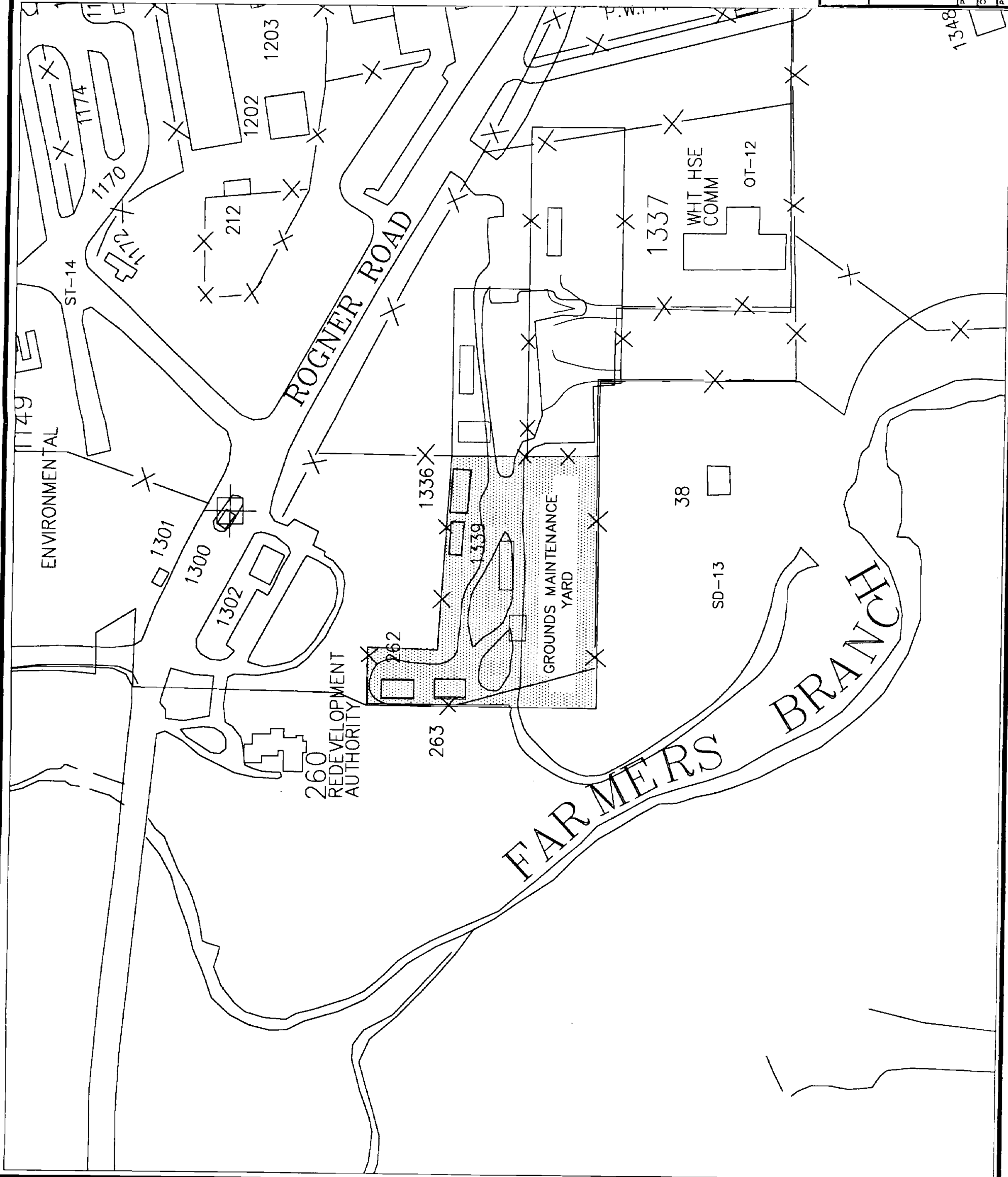
PREPARED BY: <i>SDM</i> 7/19/96	FIGURE NUMBER: 1-2	FILE DATE: 20 JAN 96
CHECKED BY: <i>EDS</i> 7/19/96		PLOT DATE: 19 FEB 96
PROJECT NO. 11-3517-3209		FILE NAME: atm-csm.p.dwg

This 12.5-acre museum site has been used for display of various aircraft, vehicles, and storage equipment. A records search indicated that an asphalt batching plant was previously located at the site. Also, a B-52 bomber was previously stored and dismantled at the site, resulting in small chips of aircraft skin being buried in the surface soil. NAS Fort Worth personnel conducted a site survey on April 9, 1993, and reported the following in their report (NAS Fort Worth, 1993):

- Several spots of stressed vegetation and dark oily spots near aircraft and ground vehicle displays
- Stressed vegetation along the west fence line and randomly throughout the aircraft display area
- A 55-gallon drum of material assumed to be waste grease
- Discarded paint cans
- A 55-gallon drum of cleaning compound
- Several rusted and unidentifiable cans and drums

In October, 1994, LAW and AFCEE representatives met at NAS Fort Worth to visit the Aerospace Museum Site and found that the debris listed above had been removed, and neither surface staining nor distressed vegetation were evident.

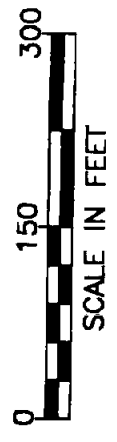
The Grounds Maintenance Yard (GMY) is located in the southeast corner of NAS Fort Worth near the Main Entrance (Figure 1-3). It is a predominantly graveled yard, with some areas of asphalt pavement, two small maintenance buildings, a pesticide storage shed, two 500-gallon aboveground storage tanks located on a concrete containment pad, and two office trailers. The site slopes gently from northwest to southeast. A site walk-through survey by LAW and AFCEE personnel found some soil staining and areas suspected to have formerly contained chemical storage sheds and/or petroleum storage tanks.



LEGEND:



AREA OF GROUNDS MAINTENANCE YARD



SCALE IN FEET

UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

**GROUNDS MAINTENANCE YARD
VICINITY MAP**

PREPARED BY: <i>SDM 7/10/96</i>	FIGURE NUMBER: 1-3	FILE DATE: 22 JAN. 96
CHECKED BY: <i>SDM 7/10/96</i>		PLOT DATE: 19 FEB. 96
PROJECT NO. 11-3517-3209		FILE NAME: gfm-csmp.dwg

Based on review of available information, a primary source of potential contamination at both sites would be intermittent surface spills of petroleum-related products and solvents, which may have also contained metals. In addition, intermittent spills of pesticides are suspected to have occurred at the Grounds Maintenance Yard. LAW was unable to locate other written documentation concerning investigative activities at either site.

2.0 PROJECT ACTIVITIES

The following sections describe the project objectives and the activities conducted as part of the Site Investigation/Site Characterization at the Aerospace Museum Site (AMS) and the Grounds Maintenance Yard (GMY). The activities include procedures associated with the selection of sampling locations, execution of field activities, and laboratory analysis of soils collected from two sites located at the Naval Air Station Fort Worth, Joint Reserve Base, Carswell Field. Results of the chemical data evaluation are also described in this section. All work was performed in accordance with the Sampling and Analysis Plan (LAW, 1995a) and Health and Safety Plan Addendum (LAW, 1995b).

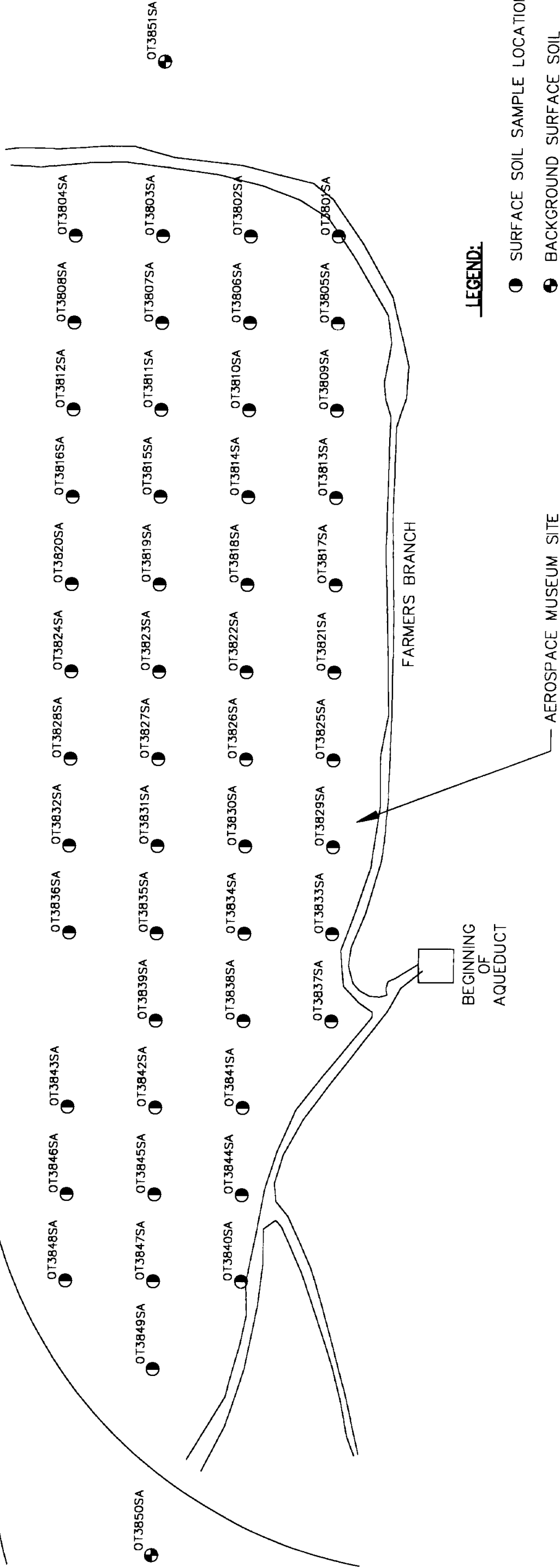
2.1 PROJECT OBJECTIVES

The objective of the soil sampling and analysis program was to conduct an initial site characterization to determine the presence or absence of contamination in surface soils resulting from previous site activities or from past operations. Previous site activities at the Aerospace Museum Site included the storage and restoration of surplus aircraft used as museum pieces. Potential contaminants include lubricants, solvents, and aircraft paint. Forty-nine surface soil samples were collected from 0 to 2 feet at locations established on a grid layout of the site, as shown on the sample location map (Figure 2-1). Sampling locations occur at approximately 100-foot intervals.

Past operations at the Grounds Maintenance Yard include storage and maintenance of groundskeeping equipment, and storage of pesticides, solvents, and fuels. Potential contaminants include lubricants, fuels, solvents, pesticides, and herbicides. Twenty-eight surface soil samples were collected from 0 to 2 feet at locations established on a grid layout of the site, as shown on the sample location map (Figure 2-2). Sample locations occur at approximately 60-foot intervals, but locations were offset to include stained areas near the two maintenance buildings and former pesticide storage building, in the area of petroleum storage tanks, and at locations where obvious soil staining was observed. Stained areas and areas of potential releases were given preference for sampling.



SPUR 341



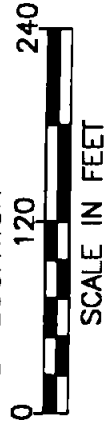
BEGINNING
OF
AQUEDUCT

FARMERS BRANCH

AEROSPACE MUSEUM SITE

LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- BACKGROUND SURFACE SOIL SAMPLE LOCATION



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH, JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE INVESTIGATION/SITE CHARACTERIZATION
WORK PLAN

AEROSPACE MUSEUM SITE
SAMPLE LOCATIONS

PREPARED BY: <i>S. Dm</i>	7/10/96	FIGURE NUMBER:	2-1	FILE DATE:	20 JAN 96
CHECKED BY: <i>S. Dm</i>	7/10/96			PLOT DATE:	10 JULY 96
PROJECT NO:	11-3517-3209			FILE NAME:	am-chem.dwg



LEGEND:

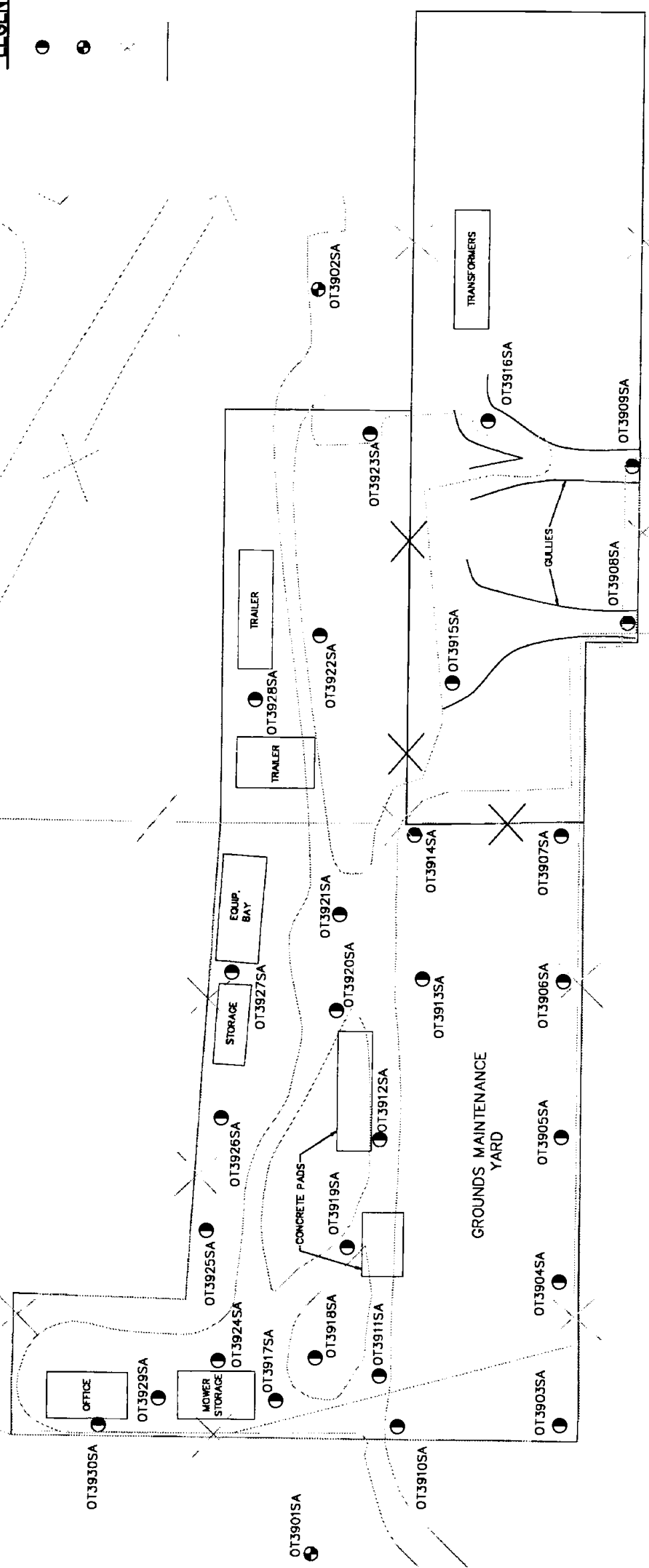
- SURFACE SOIL SAMPLE LOCATION
- ⊙ BACKGROUND SURFACE SOIL SAMPLE LOCATION
- FENCE
- SITE BOUNDARY



260

DEVELOPMENT
AUTHORITY

ROGNER ROAD



38

UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
GROUNDS MAINTENANCE YARD SAMPLE LOCATIONS	
PREPARED BY: DM 7/10/96	FIGURE NUMBER: 2-2
CHECKED BY: [Signature]	PLOT DATE: 10 JULY 96
PROJECT NO. 11-3517-3209	FILE NAME: gm-chem.dwg

Soil sampling locations were placed on a base map that was provided to LAW. The sampling locations presented on each map generated for this report were not surveyed and should be considered to be approximate locations.

2.2 FIELD ACTIVITIES

The Sampling and Analysis Plan (LAW, 1995a), describes the field activities and procedures to be used during the Site Investigation/Site Characterization at the Aerospace Museum Site and the Grounds Maintenance Yard. The following activities were performed during the field event:

- Determination of sampling locations
- Collection of surface soil samples and transport to laboratory
- Decontamination of sampling equipment

Surface soil samples were collected from 0 to 2 feet using stainless steel hand augers. Chain-of-custody records were prepared for each shipping container. Samples were sent by overnight courier to Law Environmental National Laboratories, located in Pensacola, Florida.

All sampling equipment was decontaminated before use using procedures specified in the Sampling and Analysis Plan. Decontamination water was collected for disposal as described in section 2.2.3.

All field activities were performed by LAW personnel. The following sections describe the chronology and methodology of the field activities, and field Quality Assurance/Quality Control (QA/QC) procedures.

2.2.1 Chronology of Field Work

The field activities for the Aerospace Museum Site and Grounds Maintenance Yard sampling episode were performed from October 22 to October 24, 1995. Surface soil was collected from

0 to 2 feet using stainless steel hand augers following a grid layout of the site. The soil was thoroughly mixed and placed in the appropriate containers as specified in the Sampling and Analysis Plan (LAW, 1995a). The properly labeled sample containers and chain-of-custody documents were placed in a shipping container for overnight shipment to the laboratory. Completed chain-of-custody forms are provided in Appendix A. The receiving laboratory did not indicate any problems with sample receipt or the condition of samples that would affect the quality of the data. Field sampling completeness was determined to be 100 percent.

2.2.2 Field Quality Assurance/Quality Control

Quality control parameters are monitored through the assessment of data collected for the evaluation of precision, accuracy, representativeness, and completeness. Field quality control activities consisted of the following:

- Collection of field duplicate samples to evaluate sampling precision
- Decontamination of field equipment and collection of equipment blanks
- Documentation of field information and measurements in hard bound field notebooks
- Review of field documentation, chain of custody records, and other field records

Daily meetings were conducted by the site manager for the purpose of reviewing the field procedures and quality control activities with the field team. Any corrective actions necessary were discussed, documented, and implemented immediately.

2.2.3 Investigation Derived Waste Management

Investigation derived waste (IDW) consisted of wash water and rinse water from the decontamination of field equipment. The wash water was collected and discharged to the local

wastewater treatment plant. The rinse water was stored in a 3,000-gallon polyethylene tank until the end of the sampling episode. A sample from the tank was collected and analyzed for volatiles, semi-volatiles, and metals. Based on the analytical results, LAW disposed of the water through a local hazardous waste transportation and disposal contractor.

2.3 LABORATORY ANALYSIS

The Law Environmental National Laboratories in Pensacola, Florida, provided sample shipping containers, chain-of-custody documents, chemical analysis, and laboratory quality assurance/quality control (QA/QC). The laboratory analyses were performed from October 27, 1995, to December 2, 1995. The analytical methods performed by the laboratory are summarized in Table 2-1.

The following sections describe the data quality objectives, analytical methodologies, analytical quality control program, and data quality evaluation.

2.3.1 Data Quality Objectives

The following sections discuss the evaluation criteria used to review the field and laboratory results, the formulas used to calculate quality control data, and the qualifiers applied to the sample results based on data evaluation.

2.3.1.1 Review of Field Records - Field records were evaluated for the following:

- Completeness of field records
- Identification of valid samples
- Completeness of the sampling effort
- Sample handling and shipping procedures
- Effectiveness of sampling procedures in preserving sample precision and accuracy

TABLE 2-1
ANALYTICAL TEST METHODS
Naval Air Station Fort Worth Joint Reserve Base
Fort Worth, Texas

MATRIX: SOIL	METHOD^a (soil/water)
Volatile Organics	SW 8240/8260
Semi-Volatile Organics	SW 8270
Herbicides ^b	SW 8150
Pesticides/PCBs ^c	SW 8080
Total Metals	SW 6010
Arsenic	SW 7060
Lead	SW 7421
Selenium	SW 7740
Mercury	SW 7471/7470

^a Test Methods for Evaluation of Solid Waste, SW-846 (Third Edition)

^b Herbicides collected at Grounds Maintenance Yard only.

^c Pesticides collected at Grounds Maintenance Yard only.

Note: (1) If the lead concentration detected on the inductively coupled plasma (ICP) is $>5 \times$ the instrument detection limit (IDL) on the ICP, the ICP value can be used. If the lead concentration detected on the ICP is $<5 \times$ the IDL on the ICP, then the Graphite Furnace Atomic Absorption(GFAA) analysis is required.

(2) Preparation methods for soil samples are SW 3550 for semi-volatiles and pesticides/PCBs, and SW 3050 for metals (except for arsenic). Preparation methods for water samples are SW 3520 for semi-volatiles and pesticides/PCBs, SW 3005 for metals by SW 6010, and SW 3020 for lead.

Field records were assessed for completeness and to determine whether field activities were carried out as planned. Samples were evaluated to determine their representativeness through the review of field QC results.

2.3.1.2 Review of Laboratory Data - Laboratory data were evaluated for the following:

- Chain of custody forms
- Sample integrity
- Applicability of the instruments/methods used
- Holding times
- Method calibration criteria
- Method blanks
- Verification of quantitation limits
- Laboratory sample preparation records
- Quality control results
- Corrective action for out-of-control QC results
- Calculations used for analyte quantitation and reporting
- Completeness of data

Laboratory reports containing sample results and QC information were reviewed by the laboratory QA coordinator and submitted to LAW. A case narrative was included in each data report to provide an assessment of the laboratory's QA activities. The data presented in the laboratory report was generated from the laboratory's information management system (LIMS) and was reviewed by the LAW project chemist during the data evaluation process. An electronic data deliverable (EDD) was also produced by the laboratory from the LIMS and submitted to LAW. The chemical data tables presented in this report were produced from the data base developed from the laboratory EDD. Additional processing of the information contained in the data base resulted in the generation of the positive results tables presented in Section 3. Data comparison to regulatory standards was achieved through visual review of the positive analytical results. Electronic files of the positive results were generated from the data base to transfer the data onto computer aided design and drafting (CADD) drawings.

Chemical data evaluation was performed according to LAW's standard operating procedures (SOPs) which were developed following the USEPA "National Functional Guidelines for Organic Data Review" (USEPA, 1990) and "Laboratory Data Validation: Functional Guidelines for Evaluating Inorganic Analyses" (USEPA, 1988). A standard format for the documentation of the results of data evaluation is included in the SOP. This documentation is maintained in the project file at LAW.

2.3.1.3 Formulas - The following formulas were used to calculate quality control data.

Accuracy - Accuracy is defined as the degree of agreement of a measurement with an accepted reference or true value. To determine the accuracy of an analytical method, a sample spiking program was conducted. The results of sample spiking was used to calculate the percent recovery (%R). The percent recovery is defined as follows:

$$\%R = \frac{X - T}{K} \times 100$$

where:

%R = percent recovery

X = analytical result of the spiked sample

T = analytical result of the unspiked sample

K = known amount of the spike in the sample

Surrogates, matrix spike and matrix spike duplicates (MS/MSD), and internal standards were analyzed to determine accuracy. The control limits were based on the mean percent recovery plus or minus 3 standard deviations of the mean using a population of 20 or more recovery values.

Precision - Precision is the measure of mutual agreement among individual measurements of the same property, under similar conditions. Precision between duplicate measurements is best expressed in terms of relative percent difference (RPD). Precision was assessed through the use of field duplicate samples and MS/MSD samples. An RPD for each sample pair was calculated using the following equation:

$$RPD = \frac{A - B}{(A + B)/2} \times 100$$

where:

A = replicate value 1

B = replicate value 2

RPD = relative percent difference

The laboratory established control limits were based on a population of ten or more RPD values. They were calculated by determining the mean RPD plus three times the standard deviation for the upper limit and zero as the lower limit.

Completeness - Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. The result is expressed as a percentage determined by analyte, by method. For this project, a completeness goal of 90 percent was established.

$$\text{Percent completeness} = \frac{\text{Number of valid measurements}}{\text{Total number of measurements}} \times 100$$

2.3.1.4 Data Qualifiers - Data qualifiers are used to flag sample results if accuracy or precision criteria have not met the QC requirements presented in Appendix A of the Sampling and

Analysis Plan (LAW, 1995a). Data qualification flags used for this project are presented in Table 2-2. Each data point reported is graded as usable as reported, usable with qualifications, or rejected. All data determined to be usable as reported or usable with qualifications are considered valid data for the purpose of calculating the data completeness for the project.

2.3.2 Analytical Methodologies

All soil samples collected at the Aerospace Museum Site were analyzed for volatile organic compounds, semi-volatile organic compounds, and total metals. The soil samples collected at the Grounds Maintenance Yard were analyzed for volatile organic compounds, semi-volatile organic compounds, pesticides/PCBs, chlorinated herbicides, and total metals. Soil samples were analyzed by the U.S. Environmental Protection Agency (USEPA) SW-846 methodologies listed in Table 2-1.

Quantitation limits were based on the method detection limits (MDLs) established by the laboratory using the required USEPA procedure specified in 40 CFR Part 136 Appendix B. The 1995 laboratory established detection and quantitation limits are presented in Appendix A of the Sampling and Analysis Plan (LAW, 1995a). Sample results detected below the practical quantitation limit (PQL) but above the MDL were reported and the data were flagged as estimated values using the qualifier "JQ."

2.3.3 Analytical Quality Control

The quality of the chemical data is assessed through the evaluation of both field and laboratory QC data. The QC parameters that were evaluated include: sample preservation and holding time requirements, batch method blank analysis, LCS analysis, internal standard recovery, MS/MSD analysis, surrogate analysis, field duplicate analysis, trip blank analysis, and equipment blank analysis.

TABLE 2-2

DATA QUALIFICATION FLAGS
Naval Air Station Fort Worth Joint Reserve Base
Fort Worth, Texas

FLAG	POSITIVE RESULTS	NEGATIVE RESULTS
FLAGS FOR DATA WITHIN ACCEPTANCE LIMITS (Usable as Reported)		
(no flag)	{Use datum without qualification}	{Use datum without qualification}
FLAGS FOR DATA WITHIN ACTION LIMITS (Usable With Qualification)		
J	Estimated quantitation based upon QC data	Estimated quantitation based upon QC data
JB	Estimated quantitation: possible biased high or false positive based upon blank data	(Not applicable)
JH	Estimated quantitation - possibly biased high based upon QC data	(Not applicable)
JL	Estimated quantitation - possibly biased low based upon QC data	Possible false negative based upon QC data
Jd	Estimated result due to dilution	Reporting limit raised due to dilution
JQ	Estimated quantitation; result below the PQL	(Not applicable)
FLAGS FOR DATA OUTSIDE OF ACTION LIMITS (Unusable)		
R	Datum rejected based upon QC data: do not use	Datum rejected based upon QC data: do not use
MISCELLANEOUS FLAGS		
t	Tentatively identified compound; identity not confirmed with standard and quantitation estimated (applicable to GC/MS data only)	(Not applicable)

Note that if the QC results suggest contradictory flags, the following hierarchy should be used to select the appropriate flag to assign:

- R > J, JH, JL, JB, Jd
- JH + JL = J
- Jd > JH, JL
- Jd > JB (where JB is due to laboratory method blank or field blanks)
- JB > Jd (where JB is due to laboratory system blank)
- JB > J
- JH or JL > J

Quality control limits are generated annually by the laboratory based on statistical analysis of historic data. The QC limits for laboratory control samples (LCS) recovery, surrogate recovery, and matrix spike/matrix spike duplicate (MS/MSD) recovery and precision were presented in Appendix A of the Sampling and Analysis Plan (LAW, 1995a).

2.3.3.1 Sample Handling - Samples were transported to the laboratory daily by overnight express shipment. Upon receipt of the shipment, the laboratory recorded the temperature of each cooler and checked the preservation of aqueous samples. Adjustment of sample pH was performed as needed and recorded. Samples were maintained at the laboratory at a temperature of 4 degrees Celsius until analysis. Holding times for extraction and analysis were strictly adhered to following the requirements of the Sampling and Analysis Plan.

2.3.3.2 Method Blanks - Method blanks consist of organic-free or deionized water that is carried through the analytical scheme like a sample. Positive method blank results indicate the presence of contamination associated with sample preparation or analysis. For most analyses, a method blank is analyzed for each extraction or analysis batch at a frequency of 1 per 20 or fewer samples. If an analyte of interest is detected above the quantitation limit in a method blank, the corrective action consists of reprocessing and reanalyzing the entire sample batch. For the common organic contaminants such as methylene chloride, acetone, toluene, 2-butanone, and phthalates, and the inorganic contaminants, aluminum, calcium, iron, magnesium, sodium and potassium, reanalyses were performed only if contaminants exceeded three times the quantitation limit.

2.3.3.3 Laboratory Control Samples - Laboratory control samples were analyzed with every batch of 20 or fewer samples. LCS samples were prepared for each method by the addition of known concentrations of all method analytes. LCS samples were carried through the complete sample preparation and analysis procedure, and recoveries of the spiked analytes were determined and compared to QC criteria. Batch acceptance was based on the successful recovery of all analytes of interest as specified in the Sampling and Analysis Plan, and

acceptable recovery of at least 80 percent of the total analyte list for each method. Failure to meet these criteria resulted in reprocessing and reanalyzing the entire sample batch.

2.3.3.4 Internal Standards - Internal standard results were evaluated for methods SW-8240 and SW-8270 according to method requirements. Failure to meet the internal standard recovery or retention time criteria resulted in reanalysis of the affected samples.

2.3.3.5 Matrix Spikes - The MS/MSD samples were designated prior to sampling to allow for the collection of additional aliquots of the sample in the field. At the laboratory, the sample aliquots were spiked with known concentrations of the analytes of interest, and the samples were prepared and analyzed with a batch of 20 or fewer samples. The spike recoveries and the precision between duplicate spikes were calculated and evaluated compared to QC criteria. This technique allows for the assessment of any effect of the matrix on the precision and accuracy of the sample data. No corrective action was required for MS/MSD recoveries that failed QC criteria as long as the associated LCS results were within control.

2.3.3.6 Surrogates - Surrogates are known amounts of selected compounds added to all field and QC samples prior to preparation and analysis. Surrogate recoveries were evaluated for methods SW-8240, SW-8270, SW-8150, and SW-8080. The recovery of surrogates may be used to determine the effect of the matrix on the accuracy of the sample data. Surrogate recovery failure required reanalysis of the affected sample.

2.3.3.7 Field Precision - Field duplicate samples were collected from eight locations during the soil sampling activities. The results of field duplicates were used to evaluate sampling precision. A relative percent difference (RPD) was calculated from the positive results of the sample and its duplicate, and the RPD values were compared to a precision goal of 30 percent. For sample values less than five times the quantitation limit, the precision is determined by calculating the difference between the concentrations reported in the sample and its duplicate. The criteria used to evaluate this result is the concentration equivalent to two times the PQL. Sample results for

those parameters with field precision greater than the criteria of 30 percent RPD or two times the PQL, as applicable, are qualified as estimated values.

2.3.3.8 Trip Blanks - Trip blanks were shipped with each cooler containing samples collected for analysis of volatile compounds. Trip blanks were prepared by the laboratory from organic-free water, and were handled, packaged, preserved, and shipped in a manner similar to actual field samples. Trip blanks were analyzed for volatile organics to detect contamination that may have resulted from cross-contamination or ambient sources of contamination during shipment and handling.

2.3.3.9 Equipment Blanks - Equipment blanks were collected during the sampling activities to evaluate the effectiveness of equipment decontamination procedures. One equipment blank was collected each day during the sampling event. Equipment blanks were analyzed for the same parameters as those requested on environmental samples.

2.3.3.10 Completeness - Completeness measures the amount of usable data resulting from a data collection activity. Completeness for the purpose of this project was defined as the amount of sample data points actually acquired and accepted as valid, divided by the number of sample data points planned to be acquired, expressed as a percentage. Valid data is defined as all data which was not rejected as a result of data quality evaluation. A completeness goal of 90 percent was expected to be achieved for this project.

2.3.4 Data Quality Evaluation

The parameters of precision, accuracy, representativeness, completeness, and comparability are indicators of data quality (USEPA, 1987). The field QC data and laboratory QC data were evaluated to ascertain the quality of the chemical data. The QC data were compared to the criteria presented in the Sampling and Analysis Plan (LAW, 1995a). If QC problems were encountered during the performance of sampling and analysis procedures, corrective action was immediately initiated, and the problem and its resolution are reported in the following section.

If QC problems affected the data reported for a field sample and corrective action did not resolve the problem, or holding time constraints did not allow for re-extraction/reanalysis, the data for that sample has been qualified following LAW's standard operating procedures for data evaluation. The following sections present the procedures used for evaluation of the field and laboratory data, and the results of the data quality evaluation.

2.3.4.1 Laboratory Methods and Detection Limit Requirements - The laboratory followed the analytical methods presented in the Sampling and Analysis Plan. All method detection limits provided in Appendix A of the plan were met. Sample results were quantitated below the Practical Quantitation Limit (PQL) in order to meet project required detection limits. Results reported below the PQL were qualified as estimated (JQ).

2.3.4.2 Calibration - Initial calibrations and continuing calibrations were evaluated according to method-specific calibration criteria. Failure to meet calibration criteria resulted in qualification of the associated sample data. Results associated with a high relative standard deviation in the initial calibration or a high percent difference in the continuing calibration were qualified as estimated (J). Low relative response factors resulted in the qualification of associated positive results as estimated (J) and the rejection (R) of associated nondetects. All calibrations met the required criteria with the exception of the following:

Volatiles Analyses

- The relative response factor of the continuing calibration was below the minimum response criterion for 2-chloroethyl vinyl ether for several analysis batches. Associated sample results were nondetect; therefore, the sample data for this compound were rejected (R).
- Several continuing calibrations exhibited high percent differences for chloroethane, 2-chloroethyl vinyl ether, vinyl acetate, acetone, 2-hexanone, and 2-butanone. Associated samples were qualified as estimated (J).

Semi-Volatiles Analyses

- The initial calibration performed on instrument BNA-1 on November 14, 1995, resulted in a percent relative standard deviation value greater than the method criteria for 4-chloroaniline. The initial calibration performed on instrument BNA-2 on November 6, 1995, resulted in a percent relative standard deviation value greater than the method criteria for 2,4-dinitrophenol. The sample results associated with an analytical batch for which a compound failed the criteria, were qualified as estimated (J).
- Several continuing calibrations resulted in percent difference values greater than the method criteria. The following compounds were affected: hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-chloroaniline, bis(2-chloroisopropyl)ether, 3,3'-dichlorobenzidine, and 4,6-dinitro-2-methylphenol, 4-nitrophenol. The sample results associated with an analytical batch for which a compound failed the criteria, were qualified as estimated (J).

Herbicides Analyses

- The initial calibration performed on November 18, 1995, resulted in Dalapon outside the method criteria on the primary and secondary columns. Associated results were qualified as estimated (J). The initial calibration performed on November 25, 1995, resulted in Dichloroprop outside the method criteria on the primary column. Associated results were qualified as estimated (J).

2.3.4.3 Method Blanks - Method blanks were analyzed to determine the effect of laboratory contamination on sample results. The reported values of constituents in samples may be attributable to blank contamination if the concentrations were less than or equal to five times the blank concentration or, for certain common laboratory contaminants, ten times the blank concentration. Sample results attributable to blank contamination were qualified as estimated (JB). Method blank results were nondetect with the exception of the following:

Metals Analyses

- ICPSB3803 contained 0.400 mg/kg of iron. Associated positive sample results less than five times the blank concentration (2.00 mg/kg) were qualified as estimated (JB). However, all associated results were greater than five times the blank concentration, and qualification was not necessary.
- ICPSB3094 contained 6.80 mg/kg of aluminum, 34.1 mg/kg of potassium, and 23.1 mg/kg of sodium. Associated positive sample results less than five times the blank concentrations (34 mg/kg for aluminum, 170 mg/kg for potassium, and 116 mg/kg for sodium) were qualified as estimated (JB). Associated aluminum and potassium results were not qualified because concentrations were greater than five times the blank value.
- ICPSB3124 contained 0.700 mg/kg of copper. No associated samples contained positive results less than five times the blank concentration; therefore no data were qualified.
- ICPWB3107 contained 0.0190 mg/L of copper and 0.251 mg/L of sodium. No associated copper samples contained positive results less than five times the blank concentration; therefore no copper data were qualified. Associated positive sodium results less than five times the blank concentration (1.255 mg/L for sodium) were qualified as estimated (JB).
- FSB3121 contained 0.122 mg/kg of lead. No associated samples contained positive results less than five times the blank concentration; therefore no data were qualified.

Pesticides/PCB Analyses

- PPSB7423, PPSB7499, PPSB7459 contained 0.00215 mg/kg, 0.00269 mg/kg, and 0.0100 mg/kg of methoxychlor, respectively. With the exception of sample FDUP-07, associated samples did not contain positive results less than five times the blank concentration. Sample FDUP-07 was qualified as estimated (JB) for methoxychlor.

2.3.4.4 Laboratory Control Sample Results - Laboratory control samples (LCSs) were used to demonstrate method accuracy. The LCS analytes which were outside of control limits resulted

in the qualification of the associated sample results as estimated, biased high (JH) for high recoveries, or biased low (JL) for low recoveries. LCS recoveries less than 10% resulted in rejection (R) of nondetect sample results. The LCS results were within control limits with the exception of the following:

Metals Analyses

- ICPSL3094 had high recovery of potassium. Associated positive sample results were qualified as estimated biased high (JH) for that compound.
- ICPSL3092 had high recovery of potassium. No associated samples contained positive results; therefore, no data were qualified.

Semi-Volatiles Analyses

- SSL7468, SSL7476, SSL7450, and SSL7480 had low recovery of bis(2-chloroisopropyl)ether. Associated sample results were qualified as estimated biased low (JL) for that compound.
- SSL7421 had low recovery of bis(2-chloroisopropyl)ether, and no recovery of hexachlorocyclopentadiene. Associated sample results were qualified as estimated biased low (JL) for bis(2-chloroisopropyl)ether. Associated positive sample results were qualified estimated biased low (JL), and associated nondetect sample results were rejected (R) for hexachlorocyclopentadiene.
- SSL7498 had low recovery of 2,4-dimethylphenol and no recovery of hexachlorocyclopentadiene. Associated sample results were qualified as estimated biased low (JL) for 2,4-dimethylphenol. Associated positive sample results were qualified estimated biased low (JL), and associated nondetect sample results were rejected (R) for hexachlorocyclopentadiene.
- SSL7444 had low recovery of 2,4-dimethylphenol and bis(2-chloroisopropyl)ether, and no recovery of hexachlorocyclopentadiene. Associated sample results for were qualified as estimated biased low (JL) for 2,4-dimethylphenol and bis(2-chloroisopropyl)ether. Associated positive sample results were qualified estimated biased low (JL), and associated nondetect sample results were rejected (R) for hexachlorocyclopentadiene.

Pesticides/PCB Analyses

- PPSL7499 had high recovery of heptachlor. There were no positive results for associated samples; therefore, no data were qualified.

Herbicides Analyses

- HERBSL7430 had low recovery for secondary column results of MCPA, and low recovery for primary column results of dicamba. Associated sample results were qualified estimated biased low (JL) for dicamba. MCPA was not detected on the primary column; therefore, data was not qualified.
- HERBSL7501 had high recovery for results of MCPA and MCPP. There were no positive results for this analyte; therefore, no data were qualified.

2.3.4.5 MS/MSD Results - MS/MSD samples were analyzed to assess method accuracy and precision. The results of the analysis of MS/MSD samples are provided in Appendix B. The sample associated with an MS/MSD pair was qualified as estimated, biased high (JH) for high recoveries, or biased low (JL) for low recoveries. If only one sample of the matrix spike pair was outside of the QC range, the other sample was evaluated for whether its recovery was above or below the median of the control range. Bias was assigned only if both spikes exhibited a trend in the same direction. When RPD values exceeded the QC criteria for precision, the sample results were qualified as estimated (J) unless the result had already been qualified "JH" or "JL" based on spike recoveries. MS/MSD results were within QC ranges with the exception of the following:

Metals Analyses

- Sample OT3913SA was analyzed as an MS/MSD sample. Antimony, molybdenum, and selenium had low MS and MSD recoveries. The associated sample result was qualified estimated biased low (JL) for these metals. Manganese and nickel had MS and/or MSD recoveries outside QC criteria; however, because the sample concentration was greater than

four times the spike amount, the results were not qualified. Cadmium had low MS recovery, and the RPD was higher than the control limit. The result was qualified as estimated (JL) for cadmium. Chromium had high MS and MSD recoveries. The result was nondetect; therefore, no qualification was necessary.

- Sample OT3840SA was analyzed as an MS/MSD sample. Antimony and arsenic had low MS and MSD recoveries. The associated sample result was qualified estimated biased low (JL) for these metals. Manganese and nickel had MS and/or MSD recoveries outside QC criteria; however, because the sample concentration was greater than four times the spike amount, the results were not qualified. Barium, cobalt, copper, and silver had RPDs higher than the control limits. The sample result was qualified as estimated (J) for these metals. Beryllium had high MS and MSD recoveries, and the RPD was higher than the control limit. The result was nondetect; therefore, no qualification was required. Cadmium, molybdenum, and selenium had low MS and MSD recoveries, and the RPD was higher than the control limit. The result was qualified as estimated biased low (JL) for these metals. Thallium and zinc had low MSD recovery, and the RPD was higher than the control limit. The result was qualified as estimated (J) for thallium and zinc. Lead had high MS and MSD recoveries, and the RPD was higher than the control limit. The result was qualified as estimated biased high (JH) for lead.
- Sample OT3830SA was analyzed as an MS/MSD sample. Antimony, molybdenum, arsenic, and selenium had low MS and low MSD recoveries. The associated sample result was qualified as estimated biased low (JL) for these metals. Cadmium had low MS and MSD recoveries, and the RPD was higher than the control limit. The sample result was qualified as estimated biased low (JL) for cadmium. Manganese had low MSD recovery, and the RPD was higher than the control limit. The sample concentration for manganese was greater than four times the spike amount; therefore, the sample results were not qualified. Lead had high MS recovery, and the RPD was greater than the control limit. The result was qualified as estimated (J) for lead.
- Sample OT3850SA was analyzed as an MS/MSD sample. Antimony, cadmium, arsenic, and selenium had low MS and low MSD recoveries. The result was qualified as estimated biased low (JL) for these metals. Molybdenum had low MS recovery; therefore, the result was qualified (JL) estimated biased low. Manganese, lead, and nickel failed MS and/or MSD recoveries, and the RPD was higher than the control limit for manganese. The sample concentration for these metals was greater than four times the spike amount; therefore, the sample results were not qualified.

- Sample OT3820SA was analyzed as an MS/MSD sample. Antimony had low MS and MSD recoveries, and the RPD was higher than the control limit. The result was qualified as estimated biased low (JL) for antimony. Cadmium, molybdenum, arsenic, and selenium had low MS and MSD recoveries. The associated sample results were qualified as estimated biased low (JL) for these metals. Manganese failed MS recovery, and the RPD was higher than the control limit. The sample concentration was greater than four times the spike amount; therefore, the sample result was not qualified. Lead had high MS and MSD recoveries, and the RPD was greater than the control limit; however, the sample concentration was greater than four times the spike amount and the sample was not qualified.
- Sample OT3815SA was analyzed as an MS/MSD sample. Antimony, cadmium, copper, and selenium had low MS and/or MSD recoveries. The results were qualified as estimated biased low (JL) for antimony, cadmium, copper, and selenium. Manganese and nickel failed MS and/or MSD recoveries. The sample concentration for manganese and nickel was greater than four times the spike amount; therefore, the results were not qualified. Chromium and arsenic had low MS and/or MSD recoveries, and the RPDs were greater than 20 percent. The sample results were qualified as estimated biased low (JL) for arsenic and estimated (J) for chromium.
- Sample OT3930SA was analyzed as an MS/MSD sample. Antimony, cadmium, molybdenum, arsenic and selenium had low MS and MSD recoveries, and the RPD was greater than 20 percent for antimony. The results were qualified as estimated biased low (JL) for these metals. Manganese had low MSD recoveries, and the RPD was greater than the control limit. The sample concentration for manganese was greater than four times the spike amount; therefore, the results were not qualified. Lead had RPD results greater than the control limit; therefore, results were qualified (J) as estimated.
- Sample OT3920SA was analyzed as an MS/MSD sample. Antimony, cadmium, and selenium had low MS and MSD recoveries, and the RPD was higher than the control limit for cadmium. The result was qualified as estimated biased low (JL) for antimony, cadmium, and selenium. Zinc had low MSD recovery, and the RPD was greater than 20 percent. The associated sample result was qualified as estimated (J) for zinc. Manganese and lead failed MS and MSD recoveries, and the RPD for manganese, lead, and nickel were higher than the control limit. The sample concentrations were greater than four times the spike amount; therefore, the sample result was not qualified. Barium, chromium, and copper had high MS and/or MSD recoveries, and the RPDs were greater than 20 percent for barium and chromium. Positive results were qualified as estimated biased high (JH) for these metals.

- Sample OT3822SA was analyzed as an MS/MSD sample. Antimony, cadmium, and molybdenum, arsenic, lead, and selenium had low MS and MSD recoveries, and the RPD was higher than the control limit for antimony and lead. The result was qualified as biased low (JL) for antimony, cadmium, molybdenum, arsenic, lead, and selenium. Manganese failed MS and MSD recoveries, and the RPD for manganese was higher than the control limit. The sample concentrations were greater than four times the spike amount; therefore, the sample result was not qualified. Chromium and zinc had low MS recoveries, and the RPD was higher than the control limit. The associated sample results were qualified as estimated (J) for chromium and zinc.

Volatiles Analyses

- Sample OT3840SA was analyzed as an MS/MSD sample. Tetrachloroethene had low MS and MSD recoveries. The associated sample was qualified as estimated biased low (JL) for tetrachloroethene.

Semi-Volatiles Analyses

- Sample OT3820SA was analyzed as an MS/MSD sample. Benzo(a)pyrene had an RPD greater than QC limits. The associated sample was qualified as estimated (J) for benzo(a)pyrene.
- Sample OT3920SA was analyzed as an MS/MSD sample. 2,4-dinitrotoluene had low MS and MSD recoveries. Pentachlorophenol had low MSD recovery, and the RPD was greater than the control limit. The associated sample result was qualified as estimated biased low (JL) for 2,4-dinitrotoluene and pentachlorophenol.
- Sample OT3840SA was analyzed as an MS/MSD sample. 2,4-Dinitrotoluene had low MS and MSD recoveries, and was qualified (JL). Pyrene had high MS and MSD recoveries and was qualified (JH).

2.3.4.6 Post Digestion Spikes - Post digestion spikes were analyzed to assess the effect of the sample matrix on the measurement system. Post digestion spike results were within QC ranges with the exception of the following:

Metals Analyses

- Samples OT3827SA, OT3840SA, OT3824SA, OT3903SA, OT3821SA, OT3841SA, OT3835SA, OT3833SA, OT3846SA, OT3848SA, OT3828SA, FDUP-05, OT3829SA, OT3826SA, OT3839SA, OT3849SA, OT3837SA, OT3838SA, OT3831SA, OT3819SA, OT3801SA, OT3818SA, OT3817SA, OT3808SA, OT3804SA, OT3904SA, OT3914SA, OT3921SA, OT3924SA, OT3919SA, and OT3923SA had post digestion spike values less than 85 percent for selenium. The associated sample results were qualified as estimated biased low (JL) for selenium.
- Sample OT3826SA had a post digestion spike value less than 85 percent for arsenic. The associated sample result was qualified as estimated biased low (JL) for arsenic.
- Samples OT3903SA, OT3823SA, OT3916SA, and Purge H2O had post digestion spike values greater than 115 percent for lead. The associated positive sample results were qualified as estimated biased high (JH) for lead.
- Sample OT3851SA had post digestion spike values greater than 115 percent for selenium. The associated sample results were nondetect; therefore, no data were qualified.
- Samples OT3912SA, OT3915SA, OT3926SA, OT3925SA, and FDUP-07 had post digestion spike values greater than 115 percent for arsenic. The associated positive sample results were qualified as estimated biased high (JH) for arsenic. Sample OT3912SA was not qualified for arsenic because results were nondetect.

2.3.4.7 Holding Times and Preservation - The holding times were met for all parameters for the soil samples. The trip blank collected October 24, 1995, was analyzed twice. The laboratory ran method SW-8240 within the holding time; however, method SW-8260 was requested. When the error was recognized, the laboratory reanalyzed the trip blank using method SW-8260, eight days outside of holding time. The results of the initial analysis satisfied the data requirements for trip blank analysis, therefore, only the SW-8240 results were used. Project-required quantitation limits were met based on the laboratory reporting results below the PQL.

2.3.4.8 Surrogate and Internal Standard Analysis Results - Internal and surrogate standard recoveries were used to indicate acceptable extraction and analytical performance for each sample. Corrective actions initiated by the laboratory included re-extraction/reanalysis of samples exhibiting poor surrogate recovery and internal standard failures, unless failure was due to dilution. Sample results were qualified if corrective action was unsuccessful in improving the recoveries, or holding time constraints did not allow for re-extraction/reanalysis of a sample. Surrogate failures resulted in the qualification of sample results based on the observed bias. High surrogate recoveries resulted in qualification of associated positive sample results as estimated, biased high (JH). Low surrogate recoveries resulted in qualification of all associated positive and nondetect sample results as estimated, biased low (JL). If a sample required dilution and the surrogate recoveries were affected, data qualification for surrogate failure was considered unnecessary.

Internal standard failure resulted in the qualification of associated compounds as estimated (J). Extremely low recoveries (less than ten percent) resulted in rejection (R) of associated compounds. All surrogate and internal standards were within control limits with the exception of the following:

Semi-Volatiles Analyses

- Surrogate recoveries for 2-fluorophenol and phenol were outside of control limits for sample OT3801SA, due to a required 10 times dilution; therefore, no results were qualified.
- Samples OT3815SA, OT3802SA, OT3806SA, OT3813SA, OT3809SA, OT3904SA, and OT3901SA had low recoveries for one or both of the internal standards chrysene-d12 and perylene-d12. Sample OT3815SA also had low recovery for the internal standard phenanthrene-d10. All samples were reanalyzed with similar results. The analytes associated with the low internal standards were qualified as estimated (J) for the above samples.
- Surrogate recoveries for 2-fluorobiphenyl, phenol-d6, nitrobenzene-d5, and 2,4,6-tribromophenol were outside of control limits for sample OT3912SA, due to a required 50 times dilution; therefore, no results were qualified.

- Surrogate recoveries for 2-fluorophenol and phenol-d6 were outside of control limits for sample OT3801SA, due to a required 10 times dilution. No results were qualified.
- Samples OT3928SA, FDUP-07, OT3920SA, OT3926SA, OT3925SA, FDUP-08, and OT3914SA had low recoveries for the internal standard chrysene-d12 and perylene-d12. All samples were reanalyzed with similar results. Only OT3928SA improved upon reanalysis with only perylene-d12 remaining below the internal standard range. The analytes associated with the low internal standards were qualified as estimated (J) for the above samples.
- Samples OT3921SA and OT3924SA had low recoveries for one or both of the internal standards chrysene-d12 and perylene-d12. The samples were reanalyzed with similar results. The analytes associated with the low internal standards were qualified as estimated (J) for the above samples.

Pesticides/PCB Analyses

- Surrogate recoveries for DBC were low on one or both columns for several OT39 samples. The TCMX surrogate recoveries reported for these samples were within control limits; therefore, no results were qualified.

2.3.4.9 Field Duplicates - Field duplicate samples were analyzed to assess sampling precision for the analytes detected. The results of the field duplicate analyses and the corresponding RPDs are presented in Table 2-3 and Table 2-4. The RPD criterion for sample results greater than five times the quantitation limit was less than 30 percent. For sample results less than five times the quantitation limit, the difference between the two results should be less than two times the PQL. Sample results exceeding these criteria were qualified as estimated (J). All results for field duplicates met the criteria with the exception of the following:

TABLE 1-3

FIELD DUPLICATE SUMMARY TABLE
AEROSPACE MUSEUM SITE
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Sample ID : FDUP-01 22-OCT-95 0.0' - 2.0' Notes : Duplicate of OT381ISA	OT381ISA 22-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE	FDUP-02 22-OCT-95 0.0' - 2.0' Duplicate of OT381ISA
Soil pH - SW9045/NONE (none)					
623-9045 pH units Soil	7.49	7.45	0.5		7.46
PERCENT MOISTURE/02216 (%)					
Percent Moisture	12.0	11.0	8.7		7.00
METALS, TOTAL by ICP/SW 6018 (mg/kg)					
Aluminum	7620	8120	6.4		4040
Antimony	116	115	0.9		104
Barium	<2.57	0.570		2	
Beryllium	140000	98100	J	35.2	224000
Calcium	12.0	8.95			
Chromium	3.07	4.64			
Cobalt	9.39	7.00			
Copper	7590	7440			
Iron	2310	2190	2.0		121
Magnesium	479	457	5.3		3.03
Manganese			4.7		4680
Molybdenum	229	8.79			2930
Nickel	1540	1530	J		423
Potassium	68.9	61.3	JH	220.21	1.51
Sodium	17.5	19.5	JB	7.6	962
Vanadium	83.9	21.2	J	2	194
Zinc				119.3	9.31
					70.2
ARSENIC, TOTAL by GFAA/SW 7658 (mg/kg)					
Arsenic	2.47	2.05		0.42	1.14
LEAD, TOTAL by GFAA/SW 7431 (mg/kg)					
Lead	19.8	17.0	15.2		9.74
SELENIUM, TOTAL by GFAA/SW 7748 (mg/kg)					
Selenium					
GC/MS for Volatile Organics - SW9248/NONE (mg/kg)					
Toluene	0.00531	0.0115		0.00219	<0.00157
GC/MS for Semi-Volatile Organics (Capillary Column - SW9270/SW9358 (mg/kg)					
Chrysene	0.0131	JQ		0.3579	JQ
Di-n-butylphthalate	0.0212	JQ	JQ	0.0077	
Fluoranthene	0.0251	JQ		0.3459	
Phenanthrene					
Pyrene					
ba(2-Ethylhexyl)phthalate					

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation; possibly biased high or a false positive based upon blank data
JH = Estimated quantitation; possibly biased high based upon QC data
JL = Estimated quantitation; possibly biased low or a false negative based upon QC data
IQ = Estimated quantitation detected below the Practical Quantitation Limit (PQL)
R = Datum rejected based upon QC data do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL --> the difference between the concentrations is less than two times the PQL.

Res: { = exceeded RPD criteria Associated sample results were qualified as estimated values (J)

TABLE 2-3

FIELD DUPLICATE SUMMARY TABLE
AEROSPACE MUSEUM SITE
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Quantitation Limits	Sample ID : OT3821SA Sample Date : 22-OCT-95 Depth : 0.0' - 2.0' Notes :	% RPD	DIFFERENCE	FDUP-03 22-OCT-95 0.0' - 2.0' Duplicate of OT3831SA	OT3831SA 22-OCT-95 0.0' - 2.0'
Soil pH - SW9645/NONE (none)						
623-9045 pH units Soil						
PERCENT MOISTURE/DH16 (%)						
Percent Moisture						
METALS TOTAL by ICP/ASW 6018 (mg/kg)						
Aluminum	50.0	7.57	1.5		7.41	7.37
Antimony	25.0					
Barium	2.00					
Beryllium	0.300	6.00	15.4		19.0	17.0
Calcium	10.0					
Chromium	5.00	42.40	4.8		8380	8850
Cobalt	5.00	69.5	J			
Copper	5.00	191000				
Iron	5.00	1.45	JQ	0.24	2.72 JQ	8.74
Magnesium	5.00	4.34	JQ	1.31	7.27	2.50 JQ
Manganese	25.0	4100			5970	6.33
Molybdenum	1.00	2000	J		1630	6580
Nickel	5.00	372	JQ		190	1770
Potassium	5.00	1.23		0.28	1.31 JQ	168
Sodium	60.0	189			5.96	<4.46
Vanadium	25.0	712	J		815	6.42
Zinc	1.00	46.1			56.0	1060
		8.62			19.6	98.6
		63.2	10.5	0.69	20.0	18.4
						20.8
ARSENIC TOTAL by GFAA/ASW 7609 (mg/kg)						
Arsenic	0.500	0.789		0.351	0.714	1.11
LEAD TOTAL by GFAA/ASW 7411 (mg/kg)						
Lead	0.500	9.10	6.8		22.4	21.0
SELENIUM TOTAL by GFAA/ASW 7748 (mg/kg)						
Selenium	0.500				<2.19 J	0.00993 JL
GC/MS for Volatile Organics - SW9146/NONE (mg/kg)						
Toluene	0.00500	0.0526		0.00369	0.00699	0.00128 JQ
GC/MS for Semi-Volatile Organics (Capillary Column - SW9170/ASW3559 (mg/kg)						
Chrysene	0.333					
Di-n-butylphthalate	0.333					
Fluoranthene	0.333				<.411	<0.0237 JQ
Phenanthrene	0.333				0.0440 JQ	197
Pyrene	0.333				0.0342 JQ	<.397
bis(2-Ethylhexyl)phthalate	0.333					

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit (PQL)
R = Datum rejected based upon QC data do not use.

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL and the difference between the concentrations is less than two times the PQL.
Results in boxes exceeded RPD criteria. Associated sample results were qualified as estimated values (J).

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TABLE 2-3

FIELD DUPLICATE SUMMARY TABLE
AEROSPACE MUSEUM SITE
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	% RPD	DIFFERENCE	FDUP-04 22-OCT-95 0.0' - 2.0' Duplicate of OT3842SA	OT3842SA 22-OCT-95 0.0' - 2.0'	% RPD
Soil pH - SW9945/NONE (none) 623-9045 pH units Soil			0.5		7.52	7.58	0.8
PERCENT MOISTURE/D2H16 (%) Percent Moisture			11.1		3.00 J	12.0	120.0
METALS, TOTAL by ICP/SW 6010 (mg/kg)							
Aluminum	50.0		5.5		7900 J	11600 J	37.9
Antimony	25.0				2.44 JQ	1.97 JQ	
Barium	2.00		9.0		78.2	103	27.4
Beryllium	0.300			0.011	0.610 J	1.58 JQ	
Calcium	10.0		25.1		92400	116000	22.6
Chromium	5.00			1.47	7.58	10.3 JQ	
Cobalt	5.00			0.22	2.79 JQ	3.94	
Copper	5.00			0.94	7.14	10.3 JQ	
Iron	5.00		9.7		7260 J	11800 J	
Magnesium	25.0		8.2		2260	2660	47.6
Manganese	1.00		12.3	3.15	318 J	527 J	16.3
Molybdenum	5.00			0.46	1.31 JQ	1.97 JQ	49.5
Nickel	5.00				7.93	60.8	
Potassium	60.0		26.1	42.6	1420 J	2190 J	42.7
Sodium	25.0			1.2	77.9 J	338 J	
Vanadium	5.00				18.2	21.0	
Zinc	1.00		3.9		18.3 J	37.6 J	69.1
ARSENIC, TOTAL by GFAS/SW 7060 (mg/kg) Arsenic	0.500			0.396	1.18	2.42	
LEAD, TOTAL by GFAS/SW 7421 (mg/kg) Lead	0.500		6.5		25.4	20.9	19.4
SELENIUM, TOTAL by GFAS/SW 7740 (mg/kg) Selenium	0.500			2.0907			
GC/MS for Volatile Organics - SW9240/NONE (mg/kg) Toluene	0.00500			0.00371	0.00304 JQ	0.00832	
GC/MS for Semi-Volatile Organics (Capillary Column - SW9270/SW93550 (mg/kg)							
Chrysene	0.333						
Di-n-butylphthalate	0.333			0.3873			
Fluoranthene	0.333			0.353	0.0236 JQ		< 374
Phenanthrene	0.333						
Pyrene	0.333			0.3628			
bis(2-Ethylhexyl)phthalate	0.333						

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit (PQL)
R = Datum rejected based upon QC data, do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL, and the difference between the concentrations is less than two times the PQL.

in boxes exceeded RPD criteria. Associated sample results were qualified as estimated values (J)

TABLE 2-3

FIELD DUPLICATE SUMMARY TABLE

AFROSPACE MUSEUM SITE

Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	DIFFERENCE	FDUP-05 22-OCT-95 0.0' - 2.0' Duplicate of OT3848SA	OT3848SA 22-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE
Soil pH - SW9945/NONE (none)							
623-9045 pH units Soil							
PERCENT MOISTURE/D2116 (%)							
Percent Moisture							
METALS, TOTAL by ICP/SW 4010 (mg/kg)							
Aluminum	50.0						
Antimony	25.0						
Barium	2.00		0.47	7970	10700	29.2	
Beryllium	0.300			2.79 JQ	<22.7	156.2	
Calcium	10.0		0.97	82.0	83.6	1.9	
Chromium	5.00			138000	139000	0.7	
Cobalt	5.00		2.72				
Copper	5.00		1.15	4.10	4.00 JQ	2.5	
Iron	5.00		3.16	13.1 JQ	17.3 JQ	27.6	
Magnesium	5.00			10900	13200	19.1	
Manganese	25.0			2420	2800	14.6	
Molybdenum	1.00			512	479	6.7	
Nickel	5.00		0.66	1.80 JQ	2.91 JQ	47.1	
Potassium	5.00		52.87	219	242	10.0	
Sodium	60.0			1430	1770	21.3	
Sulfur	25.0			95.0	103	8.1	
Vanadium	5.00		260.1	21.4	23.3	8.5	
Zinc	1.00		2.8	218	204	6.6	
ARSENIC, TOTAL by GFAS/SW 7048 (mg/kg)							
Arsenic	0.500		1.24	5.48 J	3.53 J	43.3	
LEAD, TOTAL by GFAS/SW 7121 (mg/kg)							
Lead	0.500			722	580	21.8	
SELENIUM, TOTAL by GFAS/SW 7748 (mg/kg)							
Selenium	0.500						
GC/MS for Volatile Organics - SW3246/NONE (mg/kg)							
Toluene	0.00500		0.00528	0.000615 JQ	0.00863	173.4	
GC/MS for Semi-Volatile Organics (Capillary Column - SW3276/SW3558 (mg/kg)							
Chrysene	0.333						
Di-n-butylphthalate	0.333						
Fluoranthene	0.333		0.3504	0.0688 JQ	0.0396 JQ	53.9	
Phenanthrene	0.333			0.0266 JQ	< 392	174.6	
Pyrene	0.333			0.0795 JQ	0.0549 JQ	36.6	
ben(2-Ethylhexyl)phthalate	0.333			< 397	0.136 JQ	97.9	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit (PQL)
 R = Datum rejected based upon QC data do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL and the difference between the concentrations is less than two times the PQL.

Results in boxes exceeded RPD criteria. Associated sample results were qualified as estimated values (J)

3517-3209 31

PREPARED/DATE John Pecore / 2-23-96
 CHECKED/DATE Sue D. Max / 2-23-96

TABLE 2-4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
 Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	FDIP-06 23-OCT-95 0.0' - 2.0' Duplicate of OT3911SA	OT3911SA 23-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE
Sell pH - SW9945/NONE (neat) 623-9045 pH units Soil			7.69	7.66	0.4	
PERCENT MOISTURE/D2216 (%) Percent Moisture			18.0	21.0	15.4	
METALS, TOTAL by KCF/SW 6018 (mg/kg)						
Aluminum	50.0		6890	7000	1.6	
Antimony	25.0					
Barium	2.00		177	183	3.3	
Beryllium	0.300		1.81 JQ	<2.88 J		
Calcium	10.0		176000	177000	0.6	
Chromium	5.00					
Cobalt	5.00		<45.2 J	19.2 JQ		
Copper	5.00		2.89 JQ	3.16 JQ		
Iron	5.00		9.03 JQ	9.59 JQ		
Magnesium	5.00		6710	6830	1.8	
Manganese	25.0		2200	2260	2.7	
Molybdenum	1.00		477	493	3.3	
Nickel	5.00		2.17 JQ	2.30 JQ		
Potassium	5.00		241	257	6.4	
Sodium	60.0		1880	1930	2.6	
Sulfur	25.0		403	400	0.7	
Vanadium	5.00		9.12	9.11		0.01
Zinc	1.00		122	112	8.5	
ARSENIC, TOTAL by GFAA/SW 7648 (mg/kg)	0.500		1.82	2.05		0.23
Arsenic						
LEAD, TOTAL by GFAA/SW 7431 (mg/kg)	0.500		17.5	20.2	14.3	
Lead						
SELENIUM, TOTAL by GFAA/SW 7748 (mg/kg)	0.500					
Selenium						
Organochlorine Pesticides and PCBs - SW9909/SW3558 (mg/kg)						
4,4'-DDD	0.0033					
4,4'-DDE	0.0033		0.00167 JQ	<0.0043		0.00246
4,4'-DDT	0.0033					
Chlordane	0.0166					
Methoxychlor	0.0166					
Chlorinated Herbicides - SW9150/METHOD (mg/kg)						
2,4,5'-TP (Silver)	0.00400		<0.00488	0.00551		0.00063
GC/MS for Volatile Organics - SW9748/NONE (mg/kg)						
Toluene	0.00500		0.00631	0.0112		0.00063
GC/MS for Semi-Volatile Organics (Capillary Column - SW9728/SW3558 (mg/kg)						
2-Methylnaphthalene	0.333		0.159 JQ	<419		0.00063
Acenaphthene	0.333		0.0343 JQ	<419		0.00063
Benzo(a)anthracene	0.333					
Benzo(b)pyrene	0.333					

TABLE 2.4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carlisle Field
 Fort Worth, Texas

PARAMETER/METHOD(UNITS)		Sample ID :	FDUP-06	OT3911SA		
Quantitation Limits		Sample Date :	23-OCT-95	23-OCT-95	% RPD	
		Depth :	0.0' - 2.0'	0.0' - 2.0'		DIFFERENCE
		Notes :	Duplicate of OT3911SA			
GC/MS for Semi-Volatile Organics (Capillary Column - 5W/97/70/5W/3550 (mg/kg) (Cem'd)						
	Benz(a)fluoranthene	0.333				
	Chrysene	0.333				
	Di-n-butylphthalate	0.333				
	Fluoranthene	0.333				
	Fluorene	0.333				
	Naphthalene	0.333				
	Phenanthrene	0.333				
	Pyrene	0.333				
			0.0430 JQ	<.419	0.376	
			0.0723 JQ	<.419	0.3467	
			0.0238 JQ	<.419	0.3952	
			0.259 JQ	<.419	0.16	
			0.0731 JQ	<.419	0.3459	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation, possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation, possibly biased high based upon QC data
 JL = Estimated quantitation, possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation, detected below the Practical Quantitation Limit (PQL)
 R = Datum rejected based upon QC data; do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL and the difference between the concentrations is less than two times the PQL.

☐ Results in boxes exceeded RPD criteria. Associated sample results were qualified as estimated values (J).

TABLE 2-4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD/UNITS	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	FDUP08 24-OCT-95 0.0' - 2.0' Duplicate of OT3923SA	OT3923SA 24-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE
Soil pH - SW9945/NONE (none) 623-9045 pH units Soil			7.82	7.74	1.0	
PERCENT MOISTURE/02216 (%) Percent Moisture			19.0	17.0	11.1	
METALS, TOTAL, by ICPSW 6018 (mg/kg)						
Aluminum	50.0		7680	7520	2.1	
Antimony	25.0					
Barium	2.00		126	125	0.8	
Beryllium	0.300		0.521	0.535		0.014
Calcium	10.0		128000	122000	4.8	
Chromium	5.00		9.21	7.40		1.81
Cobalt	5.00		2.43 JQ	2.59 JQ		0.16
Copper	5.00		9.04	6910	0.9	0.77
Iron	5.00		6850	2140	1.4	
Magnesium	25.0		2110	220	14.6	
Manganese	5.00		190			
Molybdenum	5.00		6.78	7.76		0.98
Nickel	5.00		1340	1660	7.5	
Potassium	60.0		141 JB	132 JB	6.6	
Sodium	25.0		11.0	10.3		0.7
Vanadium	5.00		21.2 J	32.4 J	41.8	
Zinc	1.00					
ARSENIC, TOTAL, by GFASW 7648 (mg/kg)	0.500		0.844	0.814 JH		0.03
Arsenic						
LEAD, TOTAL, by GFASW 7431 (mg/kg)	0.500		9.09	8.67	4.7	
Lead						
SELENIUM, TOTAL, by GFASW 7748 (mg/kg)	0.500					
Selenium						
Organochlorine Pesticides and PCBs - SW9909/SW3558 (mg/kg)						
4,4-DDD	0.00333					
4,4-DDE	0.00133					
4,4-DDT	0.00333					
Chlordane	0.0166					
Methoxychlor	0.0166					
Chlorinated Herbicides - SW9159/METHOD (mg/kg)						
2,4,5-TP (Silvex)	0.00400					
GC/MS for Volatile Organics - SW9248/NONE (mg/kg)						
Toluene	0.00500		< 00594 J	0.0336 JQ		0.02766
GC/MS for Semi-Volatile Organics (Capillary Column - SW9270/SW3558 (mg/kg)						
2-Methylnaphthalene	0.333					
Acenaphthene	0.333					
Benz(a)anthracene	0.333					
Benzo(b)pyrene	0.333					

TABLE 2-4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	FDUP08 24-OCT-95 0.0' - 2.0' Duplicate of OT39255A	OT39255A 24-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE
GC/MS for Semi-Volatile Organics (Capillary Column - 5W42765W3558 (m/z24) (Cont'd)						
Benz(b)fluoranthene	0.333					
Chrysene	0.333					
Di-n-butylphthalate	0.333					
Fluoranthene	0.333					
Fluorene	0.333					
Naphthalene	0.333					
Phenanthrene	0.333					
Pyrene	0.333					
			<410	0.0127 IQ		0.3973

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 IQ = Estimated quantitation: detected below the Practical Quantitation Limit (PQL)
 R = Return rejected based upon QC data: do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL and the difference between the concentrations is less than two times the PQL.

☐ Results in boxes exceeded RPD criteria. Associated sample results were qualified as estimated values (1)

TABLE 2-4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
 Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	FDUP07 24-OCT-95 0.0' - 2.0' Duplicate of OT3928SA	OT3928SA 24-OCT-95 0.0' - 2.0'	% RPD	DIFFERENCE
Soil pH - SW9045/NONE (none)						
623-9045 pH unit Soil			7.54	7.24	4.1	
PERCENT MOISTURE/D2116 (%)						
Percent Moisture			12.0	17.0	34.5	
METALS, TOTAL by ICP/SW 6018 (mg/kg)						
Aluminum	50.0		6420	7700	18.1	
Antimony	25.0		1.81 JQ	<20.5		18.69
Barium	2.00		106	119		13
Beryllium	0.300					
Calcium	10.0		127000	113000	11.7	
Chromium	5.00		14.0 JQ	26.2 JQ		12.2
Cobalt	5.00		2.64 JQ	3.03 JQ		0.39
Copper	5.00		10.7 JQ	10.7 JQ		0
Iron	5.00		6490 J	9630 J	39.0	
Magnesium	25.0		1870	2310	21.1	
Manganese	1.00		359	381	5.9	
Molybdenum	5.00		2.06 JQ	1.72 JQ		0.34
Nickel	5.00		59.3 J	116 J	64.7	
Potassium	60.0		1560	2060	27.6	
Sodium	25.0		89.5 JB	103 JB		13.5
Vanadium	5.00		10.5	10.7	1.9	
Zinc	1.00		60.0 J	87.4 J	37.2	
ARSENIC, TOTAL by GFAASW 7049 (mg/kg)						
Arsenic	0.500		15.4 JH	2.94 J	135.9	
LEAD, TOTAL by GFAASW 7031 (mg/kg)						
Lead	0.500		15.9 J	86.0 J	137.6	
SELENIUM, TOTAL by GFAASW 7748 (mg/kg)						
Selenium	0.500		0.410 JQ	<453		0.043
Organochlorine Pesticides and PCBs - SW8060SW1558 (mg/kg)						
4,4'-DDD	0.00333		<0.0374 J	0.0342 J		0.03046
4,4'-DDE	0.00133		0.000986 JQ	0.143 J		0.142014
4,4'-DDT	0.00333		<0.0374 J	0.176 J		0.17226
Chlordane	0.0166		0.0375 J	0.0773 J		0.0398
Methoxychlor	0.0166		0.0129 JB	.0198		0.0069
Chlorinated Herbicides - SW8150/METHOD (mg/kg)						
2,4,5-TP (Silvex)	0.00400					
GC/MS for Volatile Organics - SW8140/NONE (mg/kg)						
Toluene	0.00500		0.00159 JQ	0.00668		0.00509
GC/MS for Semi-Volatile Organics (Capillary Column - SW8270/SW1558 (mg/kg)						
2-Methylanthralene	0.333					
Acenaphthene	0.333		<373 J	0.0445 JQ		0.3285
Benz(a)anthracene	0.333		<373 J	0.0433 J		0.3297
Benz(a)pyrene	0.333					

TABLE 2-4

FIELD DUPLICATE SUMMARY TABLE
 GROUNDS MAINTENANCE YARD
 Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
 Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID :		% RPD	DIFFERENCE
		Sample Date :	Depth :		
		Notes :			
		Sample ID : FDU07	OT3928SA		
		Sample Date : 24-OCT-95	24-OCT-95		
		Depth : 0.0' - 2.0'	0.0' - 2.0'		
		Notes : Duplicate of OT3928SA			

GC/MS for Semi-Volatile Organics (Capillary Column - SW82705WJ558) (mg/kg) (Cont'd)

Benz(a)fluoranthene	0.333				
Chrysene	0.333	<373 J	0.0659 J	0.3071	
Di-n-butylphthalate	0.333	<373 J	0.0651 JQ	0.3079	
Fluoranthene	0.333	0.0257 JQ	<397	0.3713	
Fluorene	0.333	0.0151 JQ	0.0873 JQ	0.0722	
Naphthalene	0.333				
Phenanthrene	0.333	<373 J	0.0368 JQ	0.3362	
Pyrene	0.333	0.0270 J	0.0961 JQ	0.0691	

Data Qualification Flags/Notes:

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 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit (PQL)
 R = Return rejected based upon QC data do not use

*Note: Percent RPD values greater than 30% are shown in boxes unless the sample or its duplicate is less than five times the PQL and the difference between the concentrations is less than two times the PQL.

☐ Results in boxes exceeded RPD criteria Associated sample results were qualified as estimated values (J)

PREPARED/DATE: John Peccore / 2-23-96
 CHECKED/DATE: Sue D. Max / 2-23-96

Metals Analyses

- Sample OT3811SA and its duplicate FDUP-01 had an RPD greater than 30 percent for calcium and zinc, and nickel failed the difference criteria. The sample and FDUP-01 were qualified "J" for these metals.
- Sample OT3821SA and its duplicate FDUP-02 had an RPD greater than 30 percent for barium and magnesium, and sodium failed the difference criteria. The sample and FDUP-02 were qualified "J" for these metals.
- Sample OT3831SA and its duplicate FDUP-03 exceeded the difference criteria for selenium. FDUP-03 was qualified "J" for this metal. Sample OT3831SA was previously qualified "JL" for selenium based on low post digestion spike recovery.
- Sample OT3942SA and its duplicate FDUP-04 had an RPD greater than 30 percent for aluminum, iron, manganese, potassium, and zinc. Beryllium and sodium failed the difference criteria. The sample and FDUP-04 were qualified "J" for these metals.
- Sample OT3848SA and its duplicate FDUP-05 had an RPD greater than 30 percent for arsenic. The sample and FDUP-05 were qualified "J" for arsenic.
- Sample OT3911SA and its duplicate FDUP-06 exceeded the difference criteria for beryllium and chromium. The sample and FDUP-06 were qualified "J" for these metals.
- Sample OT3928SA and its duplicate FDUP-07 had an RPD greater than 30 percent for arsenic, iron, nickel, zinc and lead. Chromium failed the difference criteria. The sample and FDUP-07 were qualified "J" for these metals.
- Sample OT3925SA and its duplicate FDUP-08 had an RPD greater than 30 percent for zinc. The sample and FDUP-08 were qualified "J" for zinc.

Percent Moisture

- Sample OT3842SA and its duplicate FDUP-04 had an RPD greater than 30 percent for percent moisture. The sample and FDUP-04 were qualified "J" for percent moisture.

Volatiles Analyses

- Sample OT3925SA and its duplicate FDUP-08 failed difference criteria for toluene. The sample and FDUP-08 were qualified "J" for this constituent.

Pesticides/PCB Analyses

- Sample OT3928SA and its duplicate FDUP-07 failed difference criteria for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and chlordane. The sample and FDUP-07 were qualified "J" for these constituents.

2.3.4.10 Field Blanks - Trip blanks were analyzed to assess sample contamination that may have occurred during shipping. Equipment blanks and ambient blanks were analyzed to assess sample contamination that may have occurred during sample collection. Table 2-5 presents the results of equipment blanks and ambient blanks. Table 2-6 presents the results of the trip blanks associated with two shipments of samples to be analyzed for volatile organics. Associated positive sample results may be attributable to blank contamination if the concentrations were less than or equal to five times the blank concentration or, for certain common laboratory contaminants, ten times the blank contamination. Sample results attributable to blank contamination were qualified as estimated (JB). Field blank results were nondetect with the exception of the following:

Metals Analyses - Equipment Blanks

- Equipment blank, EQB-1 collected on 10/22/95, contained 0.135 mg/L of aluminum, 0.250 mg/L of calcium, and 0.014 mg/L of zinc. All associated sample results for these metals were greater than five times blank concentrations; therefore, no results were qualified.
- Equipment blank, EQB-2 collected on 10/23/95, contained 0.120 mg/L of aluminum, 0.203 mg/L of calcium, and 0.013 mg/L of zinc. All associated sample results for these metals were greater than five times the blank concentration; therefore, no results were qualified.

TABLE 2-5

EQUIPMENT AND AMBIENT BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)							
Sample ID	AMBL-1	AMBL-2	EQB-1	EQB-2	EQB-3		
Sample Date	23-OCT-95	24-OCT-95	22-OCT-95	23-OCT-95	24-OCT-95		
Depth	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'		
Notes							
Quantitation							
Limits							
METALS, TOTAL BY ICP/SP 6818 (mg/L)							
Aluminum	0.500	-	0.135 IQ	0.120 IQ	0.0640 IQ		
Antimony	0.250	-	<0.250	<0.250	<0.250		
Barium	0.0200	-	<0.0200	<0.0200	<0.0200		
Beryllium	0.00300	-	<0.00300	<0.00300	<0.00300		
Cadmium	0.0100	-	<0.0100	<0.0100	<0.0100		
Calcium	0.100	-	0.250	0.203	0.386		
Chromium	0.0500	-	<0.0500	<0.0500	<0.0500		
Cobalt	0.0500	-	<0.0500	<0.0500	<0.0500		
Copper	0.0500	-	<0.0500	<0.0500	<0.0500		
Iron	0.500	-	<0.500	<0.500	<0.500		
Magnesium	0.250	-	<0.250	<0.250	<0.250		
Manganese	0.0100	-	<0.0100	<0.0100	<0.0100		
Molybdenum	0.0500	-	<0.0500	<0.0500	<0.0500		
Nickel	0.0500	-	<0.0500	<0.0500	<0.0500		
Potassium	0.600	-	<0.600	<0.600	<0.600		
Silver	0.0500	-	<0.0500	<0.0500	<0.0500		
Sodium	0.250	-	<0.250	<0.250	<0.250		
Thallium	0.250	-	<0.250	<0.250	<0.250		
Vanadium	0.0500	-	<0.0500	<0.0500	<0.0500		
Zinc	0.0100	-	0.0140	0.0130	0.00600 IQ		
ARSENIC, TOTAL BY GFAA/SP 7648 (mg/L)							
Arsenic	0.0500	-	<0.00500	<0.00500	<0.00500		
LEAD, TOTAL BY GFAA/SP 3005M/7421 (mg/L)							
Lead	0.00500	-	<0.00500	<0.00500	<0.00500		
MERCURY, TOTAL BY CVA/SP 7478 (mg/L)							
Mercury	0.000500	-	<0.000500	<0.000500	<0.000500		
SELENIUM, TOTAL BY GFAA/SP 7740/METHOD (mg/L)							
Selenium	0.00500	-	<0.00500	<0.00500	<0.00500		
THALLIUM, TOTAL BY GFAA/SP 3020/7241 (mg/L)							
Thallium	0.00200	-	<0.00200	<0.00200	<0.00200		
ORGANOCHLORINE PESTICIDES AND PCBs - SP 3006/SP 3520 (mg/L)							
4,4'-DDD	0.100	-	-	<0.102	<0.110		
4,4'-DDE	0.400	-	-	<0.408	<0.440		
4,4'-DDT	0.100	-	-	<0.102	<0.110		
AR1016	1.00	-	-	<1.02	<1.10		
AR1221	1.00	-	-	<1.02	<1.10		
AR1232	1.00	-	-	<1.02	<1.10		
AR1242	1.00	-	-	<1.02	<1.10		
AR1248	1.00	-	-	<1.02	<1.10		
AR1254	1.00	-	-	<1.02	<1.10		
AR1260	1.00	-	-	<1.02	<1.10		
Aldrin	0.400	-	-	<0.408	<0.440		
Chlordane	0.500	-	-	<0.510	<0.550		
Dieldrin	0.0200	-	-	<0.0204	<0.0220		
Endosulfan I	0.0500	-	-	<0.0510	<0.0550		
Endosulfan II	0.0400	-	-	<0.408	<0.440		
Endosulfan sulfate	0.100	-	-	<0.102	<0.110		
Endrin	0.0600	-	-	<0.0612	<0.0660		

TABLE 2-5

EQUIPMENT AND AMBIENT BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)																		
Quantitation Limits	Sample ID:		Sample Date:		Depth:		Notes:		AMBL-1		AMBL-2		EOB-1		EOB-2		EQB-3	

TABLE 2-5

EQUIPMENT AND AMBIENT BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)							
Sample ID :	AMBL-1	AMBL-2	EQB-1	EQB-2	EQB-3		
Sample Date :	23-OCT-95	24-OCT-95	22-OCT-95	23-OCT-95	24-OCT-95		
Depth :	0' - 0.0'	0' - 0.0'	0' - 0.0'	0' - 0.0'	0' - 0.0'		
Notes :							
Quantitation Limits							
Styrene	-	<5.00	-	-	<5.00		
Tetrachloroethene	-	<5.00	-	-	<5.00		
Toluene	-	<5.00	-	-	<5.00		
Trichloroethene	-	<5.00	-	-	<5.00		
Vinyl acetate	-	<10.0	-	-	<10.0		
Vinyl chloride	-	<10.0	-	-	<10.0		
Xylenes (total)	-	<5.00	-	-	<5.00		
cis-1,2-Dichloroethene	-	<5.00	-	-	<5.00		
cis-1,3-Dichloropropene	-	<5.00	-	-	<5.00		
trans-1,2-Dichloroethene	-	<5.00	-	-	<5.00		
trans-1,3-Dichloropropene	-	<5.00	-	-	<5.00		
% Surrogate Recovery (Control Limit)							
sur-1,2-Dichloroethane 44 %R 76-114	-	96.0	-	-	103.0		
sur-Bromofluorobenzene %R 86-115	-	98.0	-	-	98.0		
sur-Toluene-48 %R 88-110	-	101.0	-	-	101.0		
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SWB24M/NONE (µg/L)							
1,1,1-Trichloroethane	<0.500	-	<0.500	<0.500	-		
1,1,2,2-Tetrachloroethane	<0.500	-	<0.500	<0.500	-		
1,1,2-Trichloroethane	<1.00	-	<1.00	<1.00	-		
1,1-Dichloroethane	<0.500	-	<0.500	<0.500	-		
1,1-Dichloroethene	<0.500	-	<1.00	<1.00	-		
1,2-Dichloroethane	<0.500	-	<0.500	<0.500	-		
1,2-Dichloropropene	<0.500	-	<5.00	<5.00	-		
2-Butanone	<5.00	-	<5.00	<5.00	-		
2-Chloroethyl vinyl ether	<5.00	-	<5.00	<5.00	-		
2-Hexanone	<5.00	-	<5.00	<5.00	-		
4-Methyl-2-pentanone	<5.00	-	<5.00	<5.00	-		
Acetone	<0.500	-	<0.500	<0.500	-		
Benzene	<0.500	-	<0.500	<0.500	-		
Bromodichloromethane	<1.00	-	<1.00	<1.00	-		
Bromoform	<2.00	-	<2.00	<2.00	-		
Bromomethane	<1.00	-	<1.00	<1.00	-		
Carbon disulfide	<0.500	-	<0.500	<0.500	-		
Carbon tetrachloride	<0.500	-	<0.500	<0.500	-		
Chlorobenzene	<2.00	-	<2.00	<2.00	-		
Chloroethane	<0.500	-	<0.500	<0.500	-		
Chloroform	<2.00	-	<2.00	<2.00	-		
Chloromethane	<0.500	-	<0.500	<0.500	-		
Dibromochloromethane	<0.500	-	<0.500	<0.500	-		
Ethylbenzene	<2.00	-	<2.00	<2.00	-		
Methylene chloride	<0.500	-	<0.500	<0.500	-		
Styrene	<0.500	-	<0.500	<0.500	-		
Tetrachloroethene	<0.500	-	<0.500	<0.500	-		
Toluene	<5.00	-	<5.00	<5.00	-		
Trichloroethene	<2.00	-	<2.00	<2.00	-		
Vinyl acetate	<1.00	-	<1.00	<1.00	-		
Vinyl chloride	<0.500	-	<0.500	<0.500	-		
Xylenes (total)	<0.500	-	<0.500	<0.500	-		
cis-1,2-Dichloroethene	<0.500	-	<0.500	<0.500	-		
cis-1,3-Dichloropropene	<0.500	-	<0.500	<0.500	-		
trans-1,2-Dichloroethene	<0.500	-	<0.500	<0.500	-		
trans-1,3-Dichloropropene	<0.500	-	<0.500	<0.500	-		

TABLE 2-5

EQUIPMENT AND AMBIENT BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)							
Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	AMBL-1 23-OCT-95 0.0' - 0.0'	AMBL-2 24-OCT-95 0.0' - 0.0'	EQB-1 22-OCT-95 0.0' - 0.0'	EQB-2 23-OCT-95 0.0' - 0.0'	EQB-3 24-OCT-95 0.0' - 0.0'	
% Surrogate Recovery (Control Limit)							
	sur-1,2-Dichlorobenzene-d4 %R 76-114	96.0	-	94.0	94.0	-	
	sur-Bromofluorobenzene %R 86-115	97.0	-	96.0	95.0	-	
	sur-Toluene-d8 %R 88-110	99.0	-	100.0	99.0	-	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW1320 (M/L)							
10.0	1,2,4-Trichlorobenzene	-	-	<10.0	<10.9	<11.8	
10.0	1,2-Dichlorobenzene	-	-	<10.0	<10.9	<11.8	
10.0	1,3-Dichlorobenzene	-	-	<10.0	<10.9	<11.8	
10.0	1,4-Dichlorobenzene	-	-	<10.0	<10.9	<11.8	
20.0	2,4,5-Trichlorophenol	-	-	<20.0	<21.7	<23.5	
10.0	2,4,6-Trichlorophenol	-	-	<10.0	<10.9	<11.8	
10.0	2,4-Dichlorophenol	-	-	<10.0	<10.9	<11.8	
10.0	2,4-Dimethylphenol	-	-	<10.0	<10.9	<11.8 IL	
50.0	2,4-Dinitrophenol	-	-	<50.0	<54.4	<58.8	
10.0	2,4-Dinitrotoluene	-	-	<10.0	<10.9	<11.8	
10.0	2,6-Dinitrotoluene	-	-	<10.0	<10.9	<11.8	
10.0	2-Chloronaphthalene	-	-	<10.0	<10.9	<11.8	
10.0	2-Chlorophenol	-	-	<10.0	<10.9	<11.8	
10.0	2-Methylnaphthalene	-	-	<10.0	<10.9	<11.8	
10.0	2-Methylphenol	-	-	<10.0	<10.9	<11.8	
50.0	2-Nitroaniline	-	-	<50.0	<54.4	<58.8	
10.0	2-Nitrophenol	-	-	<10.0	<10.9	<11.8	
20.0	3,3'-Dichlorobenzidine	-	-	<20.0	<21.7	<23.5	
50.0	3-Nitroaniline	-	-	<50.0	<54.4	<58.8	
50.0	4,6-Dinitro-2-methylphenol	-	-	<50.0	<54.4	<58.8	
10.0	4-Bromophenyl phenyl ether	-	-	<10.0	<10.9	<11.8	
10.0	4-Chloro-3-methylphenol	-	-	<10.0	<10.9	<11.8	
20.0	4-Chloroaniline	-	-	<20.0 J	<21.7 J	<23.5 J	
10.0	4-Chlorophenyl phenyl ether	-	-	<10.0	<10.9	<11.8	
10.0	4-Methylphenol	-	-	<10.0	<10.9	<11.8	
50.0	4-Nitroaniline	-	-	<50.0	<54.4	<58.8	
50.0	4-Nitrophenol	-	-	<50.0	<54.4	<58.8	
10.0	Acenaphthene	-	-	<10.0	<10.9	<11.8	
10.0	Acenaphthylene	-	-	<10.0	<10.9	<11.8	
10.0	Anthracene	-	-	<10.0	<10.9	<11.8	
10.0	Benz(a)anthracene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0	<10.9	<11.8	
10.0	Benzofluoranthene	-	-	<10.0			

TABLE 2-5

EQUIPMENT AND AMBIENT BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)							
Sample ID :	AMBL-1	AMBL-2	EQB-1	EQB-2	EQB-3		
Sample Date :	23-OCT-95	24-OCT-95	22-OCT-95	23-OCT-95	24-OCT-95		
Depth :	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'	0.0' - 0.0'		
Notes :							
Quantitation Limit							
Hexachlorocyclopentadiene	10.0	-	<10.0 R	<10.0 R	<11.8 R		
Hexachloroethane	10.0	-	<10.0	<10.0	<11.8		
Indeno(1,2,3-cd)pyrene	10.0	-	<10.0	<10.0	<11.8		
Isochlorone	10.0	-	<10.0	<10.0	<11.8		
Naphthalene	10.0	-	<10.0	<10.0	<11.8		
Nitrobenzene	10.0	-	<10.0	<10.0	<11.8		
Pentachlorophenol	30.0	-	<30.0	<32.6	<35.3		
Phenanthrene	10.0	-	<10.0	<10.0	<11.8		
Phenol	10.0	-	<10.0	<10.0	<11.8		
Pyrene	10.0	-	<10.0	<10.0	<11.8		
bis(2-Chloroethoxy)methane	10.0	-	<10.0	<10.0	<11.8		
bis(2-Chloroethyl)ether	10.0	-	<10.0	<10.0	<11.8		
bis(2-Chloroisopropyl)ether	10.0	-	<10.0	<10.0	<11.8		
bis(2-Ethylhexyl)phthalate	10.0	-	<10.0 JL	<10.0 JL	<11.8 JL		
n-Nitrosodimethylamine	10.0	-	<10.0	<10.0	<11.8		
n-Nitrosodiphenylamine	10.0	-	<10.0	<10.0	<11.8		
% Surrogate Recovery (Control 1 only)							
sur-2,4,6-Tribromophenol %R 10-123	-	-	55.0	66.9	61.4		
sur-2-Fluorobiphenyl %R 43-116	-	-	64.0	74.8	70.8		
sur-2-Fluorophenol %R 21-100	-	-	58.0	63.2	67.0		
sur-Nitrobenzene-d5 %R 35-114	-	-	65.0	72.8	74.7		
sur-Phenol-d6 %R 10-04	-	-	61.0	69.9	71.0		
sur-Terphenyl-d14 %R 38-141	-	-	65.0	68.8	78.7		

Data Qualification Flags/Notes:

- J = Estimated quantitation based upon QC data
JB = Estimated quantitation based upon QC data
JH = Estimated quantitation; possibly biased high or a false positive based upon blank data
JL = Estimated quantitation; possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation; possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation; detected below the Practical Quantitation Limit (PQL)
R = Datum rejected based upon QC data; do not use

Results in boxes are reported above PQL

PREPARED/DATE John Pecore / 2-23-96
CHECKED/DATE Sue D. Max / 2-23-96

TABLE 2-4

TRIP BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carlisle Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Quantity Limits	Sample ID: Sample Date: Depth: Notes:	TB-102395 23-OCT-95 0.0' - 0.0'	TB-102495 24-OCT-95 0.0' - 0.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7240/NONE (µg/L)				
1,1,1-Trichloroethane	5.00	-	-	<5.00
1,1,2,2-Tetrachloroethane	5.00	-	-	<5.00
1,1,2-Trichloroethane	5.00	-	-	<5.00
1,1-Dichloroethane	5.00	-	-	<5.00
1,1-Dichloroethene	5.00	-	-	<5.00
1,2-Dichloroethane	5.00	-	-	<5.00
1,2-Dichloroethene	5.00	-	-	<5.00
2-Butanone (MEK)	10.0	-	-	<10.0
2-Chloroethyl vinyl ether	10.0	-	-	<10.0
2-Hexanone	10.0	-	-	<10.0
4-Methyl-2-pentanone	10.0	-	-	<10.0
Acetone	10.0	-	-	<10.0
Benzene	5.00	-	-	<5.00
Bromodichloromethane	5.00	-	-	<5.00
Bromoform	5.00	-	-	<5.00
Bromomethane	10.0	-	-	<10.0
Carbon disulfide	5.00	-	-	<5.00
Carbon tetrachloride	5.00	-	-	<5.00
Chlorobenzene	5.00	-	-	<5.00
Chloroethane	10.0	-	-	<10.0
Chloroform	10.0	-	-	<10.0
Chloromethane	5.00	-	-	<5.00
Dibromochloromethane	5.00	-	-	<5.00
Ethylbenzene	5.00	-	-	<5.00
Methylene chloride	5.00	-	-	<5.00
Styrene	5.00	-	-	<5.00
Tetrachloroethene	5.00	-	-	<5.00
Toluene	5.00	-	-	<5.00
Trichloroethene	5.00	-	-	<5.00
Vinyl acetate	10.0	-	-	<10.0
Vinyl chloride	10.0	-	-	<10.0
Xylenes (total)	5.00	-	-	<5.00
ca-1,2-Dichloroethene	5.00	-	-	<5.00
ca-1,3-Dichloropropene	5.00	-	-	<5.00
trans-1,2-Dichloroethene	5.00	-	-	<5.00
trans-1,3-Dichloropropene	5.00	-	-	<5.00
% Surrogate Recovery (Control Limit)				
sur-1,2-Dichloroethane-64 %R 76-114		-	-	105.0
sur-Bromofluorobenzene %R 86-115		-	-	97.0
sur-Toluene-d8 %R 88-110		-	-	101.0
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7240/NONE (µg/L)				
1,1,1-Trichloroethane	0.500	-	<0.500	-
1,1,2,2-Tetrachloroethane	0.500	-	<0.500	-
1,1,2-Trichloroethane	1.00	-	<1.00	-
1,1-Dichloroethane	0.500	-	<0.500	-
1,1-Dichloroethene	0.500	-	<0.500	-
1,2-Dichloroethane	1.00	-	<1.00	-
1,2-Dichloroethene	0.500	-	<0.500	-
2-Butanone	5.00	-	<5.00	-

TABLE 2-4

TRIP BLANK TABLE
AEROSPACE MUSEUM SITE AND GROUND MAINTENANCE YARD
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNIT)	Sample ID		Notes
	Sample	Depth	
Quantitation Limits	23-OCT-95	0.0' - 0.0'	24-OCT-95
			0.0' - 0.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SWDELANONE (ppb) cont'd			
2-Chloroethyl vinyl ether	5.00	<5.00	-
2-Hexanone	5.00	<5.00	-
4-Methyl-2-pentanone	5.00	<5.00	-
Acetone	5.00	<5.00	-
Benzene	0.500	<0.500	-
Bromodichloromethane	0.500	<0.500	-
Bromoform	1.00	<1.00	-
Bromomethane	2.00	<2.00	-
Carbon disulfide	1.00	<1.00	-
Carbon tetrachloride	0.500	<0.500	-
Chlorobenzene	0.500	<0.500	-
Chloroethane	2.00	<2.00	-
Chloroform	0.500	<0.500	-
Chloromethane	2.00	<2.00	-
Dibromochloromethane	0.500	<0.500	-
Ethylbenzene	0.500	<0.500	-
Methylene chloride	2.00	<2.00	-
Styrene	0.500	<0.500	-
Tetrachloroethene	0.500	<0.500	-
Toluene	0.500	<0.500	-
Trichloroethene	5.00	<5.00	-
Vinyl acetate	2.00	<2.00	-
Vinyl chloride	1.00	<1.00	-
Xylenes (total)	0.500	<0.500	-
cis-1,2-Dichloroethene	0.500	<0.500	-
cis-1,3-Dichloropropene	0.500	<0.500	-
trans-1,2-Dichloroethene	0.500	<0.500	-
trans-1,3-Dichloropropene	0.500	<0.500	-
% Styrene Reservoir (Control Limit)			
sur-1,2-Dichloroethene-d4 %R 76-114	91.0		-
sur-Bromofluorobenzene %R 86-115	95.0		-
sur-Toluene-d8 %R 88-110	100.0		-

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation; possibly biased high or a false positive based upon blank data
JH = Estimated quantitation; possibly biased high based upon QC data
JL = Estimated quantitation; possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation; detected below the Practical Quantitation Limit
R = Return rejected based upon QC data do not use

PREPARED/DATE: John Pearce / 2-23-96
CHECKED/DATE: Sue D. Max / 2-23-96

- Equipment blank, EQB-3 collected on 10/24/95, contained 0.064 mg/L of aluminum, 0.386 mg/L of calcium, 0.568 mg/L of sodium, and 0.006 mg/L of zinc. Associated sample results for aluminum, calcium, and zinc were greater than five times the blank concentration; therefore, no results were qualified. All associated positive sample results less than five times the blank concentration for sodium (284 mg/kg) were qualified (JB) based on blank contamination.

Volatiles Analyses - Equipment Blanks

- Equipment blanks, EQB-1 and EQB-2, contained chloroform at concentrations of 0.549 $\mu\text{g/L}$ and 0.517 $\mu\text{g/L}$, respectively. All associated sample results for chloroform were nondetect; therefore, no results were qualified.

Volatiles Analyses - Ambient Blank

- Ambient blank, AMBL-1 collected on 10/23/95, contained 0.570 $\mu\text{g/L}$ of chloroform. All associated sample results for chloroform were nondetect; therefore, no results were qualified.

2.3.4.11 Interferences - The results for chlordane reported in samples OT3909SA and OT3916SA were rejected (R) due to interferences resulting from the detection of Aroclors in these samples.

2.3.4.12 Completeness - Field completeness is defined as the number of field samples collected divided by the number of field samples planned. Field completeness was 100 percent for the sampling event because all samples were collected as planned.

The overall completeness of sampling and analysis activities is defined as the amount of acceptable data actually acquired divided by the total sample data planned. This calculation combines the field completeness and the analytical completeness. The overall completeness for the sampling event was 100 percent for all analytes with the exception of:

- 2-chloroethyl vinyl ether completeness was 96 percent for the GMY and 71 percent for the AMS as a result of rejected data due to failure to meet calibration criteria.
- Hexachlorocyclopentadiene completeness was 86 percent for GMY based on spike recovery failure in the laboratory control spike.
- Chlordane completeness was 93 percent for the GMY.

All analytical parameters met the 90 percent completeness goal for this project except 2-chloroethyl vinyl ether at the AMS and hexachlorocyclopentadiene at the GMY.

3.0 ANALYTICAL RESULTS

The following sections present a summary of the analytical chemistry results of soil samples collected at the Aerospace Museum Site and the Grounds Maintenance Yard at the Naval Air Station Fort Worth, Joint Reserve Base, Carswell Field. The analytical data summary tables are presented in Appendix C. The positive analytical results for each site are presented in tables and figures in the following sections, along with a discussion of the constituents detected at the two sites.

3.1 AEROSPACE MUSEUM SITE

The following section discusses the chemical constituents detected in soil samples collected from the Aerospace Museum Site. Forty-nine soil samples, two background samples, and five field duplicate samples were collected. The positive analytical results are presented in Table 3-1. This table also indicates which results were reported at concentrations exceeding the TNRCC Medium Specific Concentration (MSC) value for organic constituents, or the maximum background concentration and MSC value, for metal constituents. Constituents for which MSC criteria apply are also depicted on the associated figures to aid in the interpretation of the data.

3.1.1 Background Levels

Site-specific background levels of metals are based on the results from samples collected from two background locations adjacent to the site, OT3850SA, located south of the site, and OT3851SA, located north of the site (Figure 2-1). Sample data were compared to the maximum values obtained from the background samples. The secondary background sample was used when the maximum background concentrations were greater than the concentrations reported at the site. This occurred for three metals, lead, nickel and zinc. Lead appeared elevated in both background samples, indicating that the background locations may not be representative of background conditions.

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospac Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID:			
		Sample Date:	Sample Date:	Sample Date:	Sample Date:
		Depth:	Depth:	Depth:	Depth:
		Notes:	Notes:	Notes:	Notes:
SOIL pH - SW9945/NONE (none)					
623-9045 pH units Soil	-	7.84	7.73	7.37	7.74
PERCENT SOLID - D2216/NONE (percent)					
623-D2216 Moisture	-	6.00	4.00	17.0	21.0
METALS TOTAL BY ICP/MS/60 (mg/kg)					
Aluminum	NA	4190	2640	12900	7950
Antimony	0.6	2.08 JQ	1.72 JQ	<20.6	2.44 JQ
Barium	200	80.0	80.9	129	122
Beryllium	0.4	<2.40	<2.25	0.908	0.584
Cadmium	0.5	<0.800	<0.749	<0.875	<0.974
Calcium	NA	173000	209000	62700	77400
Chromium	10	40.8	7.49 JQ	12.0	9.25
Cobalt	NA	2.08 JQ	1.42 JQ	5.36	5.55
Copper	NA	24.8 JQ	6.74 JQ	8.66	8.28
Iron	NA	6880	3690	11600	11600
Magnesium	NA	1960	2090	2300	1740
Manganese	NA	370	389	574	526
Molybdenum	NA	1.52 JQ	<3.74	1.98 JQ	2.34
Nickel	10	214	198	11.0	10.4
Potassium	NA	966	614 JH	1880 JH	1450
Silver	51.1	3.36 JQ	<3.74	<4.12	<4.87
Sodium	NA	81.8	58.3 JB	155	94.4
Vanadium	NA	11.8	7.86	28.1	20.6
Zinc	NA	127	70.3	29.6	35.7
ARSENIC TOTAL BY GFAA/SW 7069 (mg/kg)					
Arsenic	3.27	1.87	1.07	1.73	2.78
LEAD TOTAL BY GFAA/SW 7431 (mg/kg)					
Lead	1.5	227	12.6	26.6	33.0
SELENIUM TOTAL BY GFAA/SW 7440/METHOD (mg/kg)					
Selenium	5.0	<0.409 JL	<0.347	<0.456	0.0940 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9245/NONE (mg/kg)					
Methylene chloride	0.5	<0.00528	<0.00572	<0.00604	0.00628 JQ
Toluene	100	0.00375 JQ	0.0178	<0.00604	<0.00643
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9276/SW3559 (mg/kg)					
Acenaphthene	613	1.40 JQ	<0.347	<0.399	<0.417
Anthracene	3070	2.24 JQ	<0.347	<0.399	<0.417
Benzo(a)anthracene	NA	3.60	0.0395 J	<0.399	<0.417
Benzo(b)pyrene	NA	2.37 JQ	<0.347 J	<0.399	<0.417
Benzo(k)fluoranthene	NA	4.81	0.0322 J	<0.399	<0.417
Benzo(g,h,i)perylene	NA	<3.51	<0.347 J	<0.399	<0.417
Benzo(b)fluoranthene	NA	<3.51	<0.347 J	<0.399	<0.417
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9276/SW3559 (mg/kg) cont'd					
Butyl benzyl phthalate	NA	<3.51	<0.347 J	<0.399	<0.417
Chrysene	NA	3.32 JQ	0.0458 J	<0.399	<0.417
Di-n-butylphthalate	1020	<3.51	<0.347	<0.399	0.0266 JQ

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospacex Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carlwell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID			
		Sample Date	Depth	Notes	
		OT3801SA 22-OCT-95 0.0' - 2.0'	OT3802SA 22-OCT-95 0.0' - 2.0'	OT3803SA 22-OCT-95 0.0' - 2.0'	OT3804SA 22-OCT-95 0.0' - 2.0'
Dibenz(a,h)anthracene	NA	<0.51	<0.347 J	<0.399	<0.417
Dibenzofuran	NA	1.04 JQ	<0.347	<0.399	<0.417
Fluoranthene	409	7.89 JQ	0.0565 JQ	<0.399	0.103 JQ
Fluorene	409	1.06 JQ	<0.347	<0.399	<0.417
Indeno(1,2,3-cd)pyrene	NA	<0.51	<0.347 J	<0.399	<0.417
Naphthalene	409	1.09 JQ	<0.347	<0.399	<0.417
Phenanthrene	NA	10.1	0.0551 JQ	<0.399	<0.417
Pyrene	310	8.54	0.147 J	<0.399	0.121 JQ
Benzo(2-Ethylfluorenyl)phthalate	2.04	<0.51	0.382 J	<0.399	1.09
Total PAHs		46.42	0.3761	ND	0.224

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation possibly biased high or a false positive based upon blank data

JH = Estimated quantitation possibly biased high based upon QC data

JL = Estimated quantitation, possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data, do not use

☐ Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerogase Messana Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID Sample Date Depth Notes	OT3805SA 22-OCT-95 0.0' - 2.0'	OT3806SA 22-OCT-95 0.0' - 2.0'	OT3807SA 22-OCT-95 0.0' - 2.0'	OT3808SA 22-OCT-95 0.0' - 2.0'	OT3809SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)							
623-9045 pH units Soil	-		7.32	7.54	7.50	7.55	7.42
PERCENT SOLID - D2116/NONE (percent)							
623-D2116 Moisture	-		9.00	9.00	15.0	14.0	10.0
METALS, TOTAL BY ICP/MSW6010SW3659 (mg/kg)							
Aluminum	NA		7130	3320	7490	11700	6230
Antimony	0.6		<20.4	2.47 JQ	<22.6	<22.2	1.69 JQ
Barium	200		83.6	112	118	0.799	78.1
Beryllium	0.4		0.570	<2.24	0.724	0.888	<2.30
Cadmium	0.5		<0.814	0.972	<0.905	0.843	140000
Calcium	NA		114000	195000	55000	48700	10.4
Chromium	10		11.3	18.7 JQ	10.9	10.4	13.0 JQ
Cobalt	NA		4.64	2.09 JQ	4.89	3.91 JQ	2.76 JQ
Copper	NA		7.73	15.7 JQ	7.87	9.15	6.89 JQ
Iron	NA		10500	4870	8710	7400	6680
Magnesium	NA		1880	2040	2200	2160	1990
Manganese	NA		353	435	422	351	291
Molybdenum	NA		2.04 JQ	<3.74	1.81 JQ	<4.44	2.22 JQ
Nickel	10		8.22	198	10.3	8.97	202
Potassium	NA		1520 JH	980 JH	1570 JH	1710	1370 JH
Silver	51.1		<4.07	<3.74	<4.52	<4.44	<3.83
Sodium	NA		79.7 JB	52.7 JB	277	134	62.5 JB
Vanadium	NA		21.4	9.42	25.6	21.0	17.2
Zinc	NA		26.6	83.0	27.1	25.4	81.2
ARSENIC, TOTAL BY GFAA/MSW 7049 (mg/kg)							
Arsenic	3.27		1.77	1.61	1.65	3.00	1.95
LEAD, TOTAL BY GFAA/MSW 7481 (mg/kg)							
Lead	1.5		21.0	26.3	49.4	25.4	19.1
SELENIUM, TOTAL BY GFAA/MSW 7749/METHOD (mg/kg)							
Selenium	5.0		<0.366	<0.413	<0.355	<0.424 JL	<1.89
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82140/NONE (mg/kg)							
Methylene chloride	0.5		<0.00561	<0.00578	<0.00593	<0.00584	<0.00579
Toluene	100		0.0129	<0.00578	0.00261 JQ	<0.00584	0.0149
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82140/NONE (mg/kg)							
Acenaphthene	613		<0.361	<0.361	<0.388	<0.384	<0.367
Anthracene	3070		<0.361	<0.361	<0.388	<0.384	<0.367
Benz(a)anthracene	NA		<0.361	<0.361	<0.388	<0.384	<0.367 J
Benz(b)fluoranthene	NA		<0.361	0.0448 J	<0.388	<0.384	<0.367 J
Benz(g,h,i)perylene	NA		<0.361	0.0596 J	<0.388	<0.384	<0.367 J
Benzofluoranthene	NA		<0.361	<0.361	<0.388	<0.384	<0.367 J
Benzofluoranthene	NA		<0.361	<0.361	<0.388	<0.384	<0.367 J
Benzyl benzoate	NA		<0.361	0.0383 JQ	<0.388	<0.384	<0.367 J
Chrysene	NA		<0.361	0.0365 JQ	<0.388	<0.384	<0.367 J
Di-n-butylphthalate	1020		<0.361	<0.361	<0.388	<0.384	0.0213 JQ

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID:		OT3806SA	OT3807SA	OT3808SA	OT3809SA
		Sample Date:	Depth:				
		22-OCT-95	0.0' - 2.0'	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		Notes:		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
Dibenz(a,h)anthracene	NA			<0.361 J	<0.388	<0.384	<0.367 J
Dibenzofuran	NA			<0.361	<0.388	<0.384	<0.367
Fluoranthene	409			0.0481 JQ	0.0113 JQ	<0.384	0.00970 JQ
Fluorene	409			<0.361	<0.388	<0.384	<0.367
Indeno(1,2,3-cd)pyrene	NA			<0.361 J	<0.388	<0.384	<0.367 J
Naphthalene	409			<0.361	<0.388	<0.384	<0.367
Phenanthrene	NA			0.0426 JQ	<0.388	<0.384	<0.367
Pyrene	110			0.0604 JQ	<0.388	<0.384	<0.367 J
bio(2-Ethylhexyl)phthalate				0.198 JQ	<0.388	<0.384	<0.367 J
Total PAHs	2.04			0.292	0.0113	ND	0.031

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation possibly biased high or a false positive based upon blank data

JH = Estimated quantitation possibly biased high based upon QC data

JL = Estimated quantitation possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Avarepax Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)						
MSC	Sample ID :	OT3810SA	OT3811SA	FDUP-01	OT3812SA	OT3813SA
	Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
Notes :	Duplicate of OT3811SA					
SOIL pH - SW9945/NONE (none)						
-	623-9045 pH units Soil	7.33	7.45	7.49	7.29	7.23
PERCENT SOLID - D2216 /NONE (percent)						
-	623-D2216 Moisture	11.0	11.0	12.0	15.0	14.0
METALS TOTAL BY ICP/ASW/6102SW/3059 (mg/kg)						
NA	Aluminum	8970	8120	7620	4740	7970
0.6	Antimony	<20.4	<20.4	<21.4	<21.5	<21.1
200	Barium	104	115	116	55.0	90.3
0.4	Beryllium	0.651	0.570	<2.56	0.344	0.506
0.5	Cadmium	<0.814	<0.814	<0.854	<0.859	<0.843
NA	Calcium	82300	98100 J	140000 J	58800	74300
10	Chromium	9.12	8.95	12.0 JQ	6.87	7.67
NA	Cobalt	7.49	4.64	3.07 JQ	3.01 JQ	3.37 JQ
NA	Copper	7.98	7.00	9.39 JQ	4.81	5.82
NA	Iron	10300	7440	7590	7030	7980
NA	Magnesium	2140	2190	2310	1280	1620
NA	Manganese	572	457	479	303	224
NA	Molybdenum	1.79 JQ	<4.07	<4.27	1.63 JQ	1.35 JQ
10	Nickel	9.28	8.79 J	229 J	6.36	8.43
NA	Potassium	1790 JH	1530 JH	1540 JH	1160 JH	1210 JH
51.1	Silver	<4.07	<4.07	<4.27	<4.30	<4.22
NA	Sodium	97.8 JB	61.3 JB	68.9 JB	110 JB	69.8 JB
NA	Vanadium	17.6	19.5	17.5	13.2	17.4
NA	Zinc	31.2	21.2 J	83.9 J	19.2	21.9
ARSENIC TOTAL BY GF/ASW/7669 (mg/kg)						
3.27	Arsenic	2.04	2.05	2.47	1.94	1.96
LEAD TOTAL BY GF/ASW/7421 (mg/kg)						
1.5	Lead	19.0	17.0	19.8	32.9	21.9
SELENIUM TOTAL BY GF/ASW/7740/METHOD (mg/kg)						
5.0	Selenium	<0.407	<0.416	<0.414	<0.439 JL	<0.418
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9248/NONE (mg/kg)						
0.5	Methylene chloride	<0.00605	<0.00571	<0.00574	<0.00534	<0.00586
100	Toluene	0.00133 JQ	0.0115	0.00931	0.000739 JQ	<0.00586
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9270SW/3559 (mg/kg)						
613	Acenaphthene	<0.369	<0.371	<0.376	<0.386	<1.93
3070	Anthracene	<0.369	<0.371	<0.376	<0.386	<1.93
NA	Benz(a)anthracene	0.0440 JQ	<0.371	<0.376	<0.386	<1.93 J
NA	Benzo(a)pyrene	0.0300 JQ	<0.371	<0.376	<0.386	<1.93 J
NA	Benzo(b)fluoranthene	0.00669 JQ	<0.371	<0.376	<0.386	<1.93 J
NA	Benzo(g,h,i)perylene	<0.369	<0.371	<0.376	<0.386	<1.93 J
NA	Benzo(k)fluoranthene	<0.369	<0.371	<0.376	<0.386	<1.93 J
NA	Buyl benzyl phthalate	<0.369	<0.371	<0.376	<0.386	<1.93 J
NA	Chrysene	<0.369	<0.371	<0.376	<0.386	<1.93 J
NA	Di-n-butylphthalate	0.0458 JQ	<0.371	0.0131 JQ	<0.386	<1.93 J
1020		<0.369	<0.371	<0.376	<0.386	<1.93

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID			OT3811SA 22-OCT-95 0.0' - 2.0'	FDUP-01 22-OCT-95 0.0' - 2.0'	OT3812SA 22-OCT-95 0.0' - 2.0'	OT3813SA 22-OCT-95 0.0' - 2.0'
		Sample Date	Depth	Notes				
				Duplicate of OT3811SA				
Dibenz(a,h)anthracene	NA				<0.371	<0.376	<0.386	<1.93 J
Dibenzofuran	NA				<0.371	<0.376	<0.386	<1.93
Fluoranthene	409				0.0135 IQ	0.0212 IQ	0.0137 IQ	<1.93
Fluorene	409				<0.371	<0.376	<0.386	<1.93
Indeno(1,2,3-cd)pyrene	NA				<0.369	<0.376	<0.386	<1.93 J
Naphthalene	409				<0.369	<0.376	<0.386	<1.93
Phenanthrene	NA				0.0935 IQ	<0.376	<0.386	<1.93
Pyrene	310				0.0864 IQ	0.0251 IQ	0.0207 IQ	<1.93 J
bat(2-Ethylhexyl)phthalate	2.04				<0.369	<0.376	<0.386	<1.93 J
Total PAHs					0.4084	0.0394	0.0344	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation possibly biased high or a false positive based upon blank data

JH = Estimated quantitation possibly biased high based upon QC data

JL = Estimated quantitation possibly biased low or a false negative based upon QC data

IQ = Estimated quantitation detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID: Sample Date Depth Notes	OT3814SA 22-OCT-95 0.0' - 2.0'	OT3814SA 22-OCT-95 0.0' - 2.0'	OT3816SA 22-OCT-95 0.0' - 2.0'	OT3817SA 22-OCT-95 0.0' - 2.0'	OT3818SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)							
623-9045 pH units Soil			7.46	7.56	7.35	8.18	7.65
PERCENT SOLID - D2116/NONE (percent)							
623-D2216 Moisture			10.0	11.0	12.0	3.00	11.0
METALS, TOTAL BY ICP/MSW/6018SW3558 (mg/kg)							
Aluminum	NA		6900	6770	4100	1210	9640
Antimony	0.6		1.87 JQ	<21.4 JL	<20.2	<19.1	<19.8
Barium	200		79.5	139	58.1	98.6	115
Beryllium	0.4		0.487	<2.57	0.242	<2.29	<2.37
Cadmium	0.5		<0.811	<0.838 JL	<0.806	<0.764	<0.791
Calcium	NA		82100	184000	85800	285000	118000
Chromium	10		14.6	19.7 J	4.84	<38.2	13.4 JQ
Cobalt	NA		3.73 JQ	4.12 JQ	2.74 JQ	0.993 JQ	3.56 JQ
Copper	NA		7.62	11.2 JL	6.13	3.82 JQ	6.33 JQ
Iron	NA		10200	8050	6000	2680	6940
Magnesium	NA		1500	2090	1320	2020	1880
Manganese	NA		255	631	290	428	355
Molybdenum	NA		1.78 JQ	<4.29	<4.03	<3.82	<3.96
Nickel	10		8.76	229	5.88	200	58.6
Potassium	NA		1330 JH	1200 JH	1080 JH	299	1300
Silver	51.1		0.568 JQ	<4.29	<4.03	<3.82	<3.96
Sodium	NA		60.7 JB	87.5 JB	43.4 JB	59.3	60.4
Vanadium	NA		20.4	23.7	13.3	3.29 JQ	17.6
Zinc	NA		25.5	79.5	25.3	61.3	33.4
ARSENIC, TOTAL BY GFAA/MSW 7649 (mg/kg)							
Arsenic	3.27		2.16	1.88 JL	1.57	0.844	2.78
LEAD, TOTAL BY GFAA/MSW 7421 (mg/kg)							
Lead	1.5		42.8	15.4	52.2	3.95	15.3
SELENIUM, TOTAL BY GFAA/MSW 7740/METHOD (mg/kg)							
Selenium	5.0		<0.400	<0.420 JL	<0.427 JL	<0.371 JL	<0.429 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)							
Methylene chloride	0.5		<0.00554	<0.00563	<0.00586	<0.00512	<0.00568
Toluene	100		0.0128	0.00750	<0.00586	0.00203 JQ	<0.00568
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9276/MSW3558 (mg/kg)							
Acenaphthene	613		0.0401 JQ	<0.374	<0.377	<0.342	<0.372
Anthracene	3070		<0.368	<0.374	<0.377	<0.342	<0.372
Benz(a)anthracene	NA		0.407	<0.374	<0.377	<0.342	<0.372
Benzofluoranthene	NA		0.471	<0.374	<0.377	<0.342	<0.372
Benzofluoranthene	NA		0.658	<0.374	<0.377	<0.342	<0.372
Benzofluoranthene	NA		0.166 JQ	<0.374	<0.377	<0.342	<0.372
Benzofluoranthene	NA		0.359 JQ	<0.374	<0.377	<0.342	<0.372
Benzofluoranthene	NA		<0.368	<0.374	<0.377	<0.342	<0.372
Butyl benzyl phthalate	NA		0.834	<0.374	<0.377	<0.342	<0.372
Chrysene	1020		<0.368	<0.374	<0.377	<0.342	<0.372
Di-n-butylphthalate							

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospac Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID		Sample Date		Depth		Notes	
		OT3814SA	OT3815SA	OT3816SA	OT3817SA	OT3818SA	OT3819SA	OT3820SA	OT3821SA
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
Dibenz(a,h)anthracene	NA	0.0765 JQ	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Dibenzofuran	NA	0.0328 JQ	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Fluoranthene	409	1.26	<0.374	0.0294 JQ	<0.342	0.0209 JQ	<0.372	<0.372	<0.372
Fluorene	409	0.0181 JQ	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Indeno(1,2,3-cd)pyrene	NA	0.256 JQ	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Naphthalene	409	0.0270 JQ	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Phenanthrene	NA	1.13	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Pyrene	310	1.25	<0.374	0.0319 JQ	<0.342	<0.372	<0.372	<0.372	<0.372
benz(2-Ethylthienyl)phthalate	2.04	<0.368	<0.374	<0.377	<0.342	<0.372	<0.372	<0.372	<0.372
Total PAHs		6.95	ND	0.0613	ND	0.0209	ND	0.0209	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation possibly biased high or a false positive based upon blank data

JH = Estimated quantitation possibly biased high based upon QC data

JL = Estimated quantitation possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Airport Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID Sample Date Depth Notes	OT3819SA 22-OCT-95 0.0' - 2.0'	OT3820SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)			7.54	7.27
673-9045 pH units Soil				
PERCENT SOLID - D3116/NONE (percent)			18.0	14.0
673-D2216 Moisture				
METALS, TOTAL BY ICP/ASW 6016/ASW3658 (mg/kg)				
Aluminum	NA	7710	14200	14200
Antimony	0.6	2.08 IQ	1.95 JL	1.95 JL
Barium	200	111	119	119
Beryllium	0.4	0.606	0.799	0.799
Cadmium	0.5	<0.863	<0.868 JL	<0.868 JL
Calcium	NA	61900	72600	72600
Chromium	10	9.17	13.9	13.9
Cobalt	NA	4.24 IQ	4.35 IQ	4.35 IQ
Copper	NA	6.06	8.61	8.61
Iron	NA	8360	11900	11900
Magnesium	NA	1460	2240	2240
Manganese	NA	374	329	329
Molybdenum	NA	1.64 IQ	1.60 JL	1.60 JL
Nickel	10	8.30	9.15	9.15
Potassium	NA	1250	2030	2030
Silver	51.1	<4.32	<4.44	<4.44
Sodium	NA	65.3	59.4	59.4
Vanadium	NA	20.6	21.8	21.8
Zinc	NA	16.6	27.8	27.8
ARSENIC, TOTAL BY GF/ASW 7646 (mg/kg)	3.27	1.42	2.21 JL	2.21 JL
Arsenic				
LEAD, TOTAL BY GF/ASW 7401 (mg/kg)	1.5	13.0	27.7	27.7
Lead				
SELENIUM, TOTAL BY GF/ASW 7746/METHOD (mg/kg)	5.0	0.108 JL	<0.430 JL	<0.430 JL
Selenium				
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)	0.5	<0.00628	<0.00569	<0.00569
Methylene chloride	100	0.00115 IQ	0.000670 IQ	0.000670 IQ
Toluene				
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9270SW3558 (mg/kg)	613	<0.401	<0.383	<0.383
Acenaphthene	3070	<0.401	<0.383	<0.383
Anthracene	NA	<0.401	<0.383	<0.383
Benzo(a)anthracene	NA	<0.401	<0.383	<0.383
Benzo(a)pyrene	NA	<0.401	<0.383	<0.383
Benzo(b)fluoranthene	NA	<0.401	<0.383	<0.383
Benzo(k)fluoranthene	NA	<0.401	<0.383	<0.383
Benzo(e)pyrene	NA	<0.401	<0.383	<0.383
Benzo(g,h,i)perylene	NA	<0.401	<0.383	<0.383
Benzo(i)fluoranthene	NA	<0.401	<0.383	<0.383
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9270SW3558 (mg/kg)	NA	<0.401	<0.383	<0.383
Butyl benzyl phthalate	NA	<0.401	<0.383	<0.383
Chrysene	NA	<0.401	<0.383	<0.383
Di-n-butylphthalate	1020	<0.401	<0.383	<0.383

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Airport Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carlisle Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID :	
		Sample Date	Depth
		Notes	
		OT38198A	OT38198A
		22-OCT-95	22-OCT-95
		0.0' - 2.0'	0.0' - 2.0'
Dibenz(a,h)anthracene	NA	<0.401	<0.383
Dibenzofuran	NA	<0.401	<0.383
Fluoranthene	409	<0.401	<0.383
Fluorene	409	<0.401	<0.383
Indeno(1,2,3-cd)pyrene	NA	<0.401	<0.383
Naphthalene	409	<0.401	<0.383
Phenanthrene	NA	<0.401	<0.383
Pyrene	310	<0.401	<0.383
benz(2-Ethylhexyl)phthalate	2.04	<0.401	<0.383
Total PAHs		ND	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation possibly biased high or a false positive based upon blank data

JH = Estimated quantitation possibly biased high based upon QC data

JL = Estimated quantitation possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data do not use

☐ Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Avrepace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)		Sample ID	OT3821SA	FDUP-02	OT3822SA	OT3823SA	OT3824SA	OT3825SA
MSC	Sample Date	Depth	Notes	22-OCT-95	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
Duplicate of OT3821SA								
SOIL pH - SW9945/NONE (none)								
673-9045 pH units Soil				7.57	7.46	7.49	7.38	7.34
PERCENT SOLID - D22116 /NONE (percent)								
623-D22116 Moisture				6.00	7.00	19.0	15.0	11.0
METALS, TOTAL BY ICP/SW6410SW/2859 (mg/kg)								
Aluminum	NA			4240	4040	12700	11000	13200
Antimony	0.6			<18.1	<18.9	<21.5 JL	<20.7	<21.4
Barium	200			69.5 J	104 J	148	176	107
Beryllium	0.4			<2.17	<2.27	0.954	0.746	1.18
Calcium	NA			191000	224000	33300	80000	150000
Chromium	10			<36.2	<37.8	22.1 J	10.4	21.4 JQ
Cobalt	NA			1.45 JQ	1.21 JQ	5.69	4.23	2.23 JQ
Copper	NA			4.34 JQ	3.03 JQ	13.2	7.88	<42.9
Iron	NA			4100	4680	10500	9510	11200
Magnesium	NA			2000 J	2590 J	2170	3200	2200
Manganese	NA			372	423	678	421	325
Molybdenum	NA			1.23 JQ	1.51 JQ	2.19 JL	1.99 JQ	2.49 JQ
Nickel	10			189	202	12.4	9.28	6.1
Potassium	NA			712	962	1880	1370	1850
Silver	51.1			<3.62	<3.78	0.613 JQ	<4.14	<4.29
Sodium	NA			46.1 J	194 J	60.4	95.1	245
Vanadium	NA			8.62	9.31	18.8	22.1	20.3
Zinc	NA			63.2	70.2	35.0 J	22.0	37.2
ARSENIC, TOTAL BY GFAA/SW 7068 (mg/kg)								
Arsenic	3.27			0.789	1.14	1.44 JL	0.957	1.86 JH
LEAD, TOTAL BY GFAA/SW 7421 (mg/kg)								
Lead	1.5			9.10	9.74	36.2 JL	23.0 JH	16.6
MERCURY, TOTAL BY CVAA/SW 7471 (mg/kg)								
Selenium	5.0			<1.90 JL	<0.371	<0.448 JL	<1.20	<0.404
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8746/NONE (mg/kg)								
Toluene	100			<0.0028	0.00157 JQ	0.00506 JQ	<0.00584	0.00449
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8746/SW/2559 (mg/kg)								
Di-n-butylphthalate	1020			<0.352	<0.355	<0.406	<0.390	<0.374
Fluoranthene	409			<0.352	<0.355	0.0383 JQ	<0.390	<0.374
Pyrene	310			<0.352	<0.355	0.0290 JQ	<0.390	<0.374
Total PAHs				ND	ND	0.0573	ND	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation, possibly biased high or a false positive based upon blank data

JH = Estimated quantitation, possibly biased high based upon QC data

JL = Estimated quantitation, possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation, detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data, do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNIT)		Sample ID: Sample Date: Depth: Notes:	OT3878SA 22-OCT-95 0.0' - 2.0'	OT3878SA 22-OCT-95 0.0' - 2.0'	OT3878SA 22-OCT-95 0.0' - 2.0'	OT3878SA 22-OCT-95 0.0' - 2.0'	OT3878SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)			7.50	7.45	7.75	7.75	7.37
623-9045 pH units Soil							
PERCENT SOLID - D3116/NONE (percent)			13.0	9.00	10.0	17.0	17.0
623-D3116 Moisture							
METALS TOTAL BY ICP/MS/7659 (mg/kg)							
Aluminum	NA		7940	5460	6050	7260	8850
Antimony	0.6		1.90 JQ	2.42 JQ	<19.6	<21.2	<22.3
Barium	200		89.3	59.8	63.3	136	106
Beryllium	0.4		<2.48	1.62 JQ	<2.39	<2.54	0.624
Calcium	NA		159000	284000	188000	222000	117000
Chromium	10		<41.4	<40.4	<39.8	11.0 JQ	8.74
Cobalt	NA		2.40 JQ	3.15 JQ	2.27 JQ	4.58	2.50 JQ
Copper	NA		4.96 JQ	8.89 JQ	3.91 JQ	6.78 JQ	6.33
Iron	NA		7170	11000	7630	8100	6360
Magnesium	NA		1810	2340	2340	2680	1770
Manganese	NA		447	538	361	667	168
Molybdenum	NA		2.87 JQ	2.99 JQ	2.03 JQ	2.54 JQ	<4.46
Nickel	10		218	218	206	224	6.42
Potassium	NA		955	1260	1210	1020	1060
Silver	51.1		<4.14	<4.04	<3.91	<4.24	<4.46
Sodium	NA		79.2	287	121	182	98.6
Vanadium	NA		19.7	20.4	15.2	28.5	18.4
Zinc	NA		72.9	77.3	70.9	75.0	20.8
ARSENIC TOTAL BY GFAA/MS/7649 (mg/kg)							
Arsenic	3.27		1.16 JL	4.14	3.21	3.47	1.11
LEAD TOTAL BY GFAA/MS/7431 (mg/kg)							
Lead	1.5		163	162	142	193	210
MERCURY TOTAL BY CYAA/MS/7471 (mg/kg)							
SELENIUM TOTAL BY GFAA/MS/7740/METHOD (mg/kg)							
Selenium	5.0		<2.11 JL	<0.413	<1.89 JL	<2.25 JL	0.0993 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7244/NONE (mg/kg)							
Toluene	100		<0.00566	0.00375 JQ	0.00366 JQ	0.00184 JQ	0.00328 JQ
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7244/NONE (mg/kg)							
D-n-butylphthalate	1020		<0.377	<0.366	<0.365	<0.400	0.0237 JQ
Fluoranthene	409		<0.377	<0.366	<0.365	0.0427 JQ	<0.397
Pyrene	310		<0.377	<0.366	<0.365	0.0479 JQ	<0.397
Total PAHs			ND	ND	ND	0.0906	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

J = Estimated quantitation based upon QC data

PAH = Polynuclear Aromatic Hydrocarbon

JH = Estimated quantitation based upon QC data

JH = Estimated quantitation, possibly biased high or a false positive based upon blank data

JL = Estimated quantitation, possibly biased low or a false negative based upon QC data

JL = Estimated quantitation, possibly biased low or a false negative based upon QC data

R = Datum injected based upon QC data, do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerropace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNIT)	Sample ID: Sample Date: Depth: Notes:	OT3832SA 22-OCT-95 0.0' - 2.0'	OT3834SA 22-OCT-95 0.0' - 2.0'	OT3835SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045NONE (mm)				
623-9045 pH units Soil				
PERCENT SOLID - D22116/NONE (percent)				
623-D22116 Moisture				
METALS TOTAL BY K75SW6916/SW2059 (mg/kg)				
Aluminum	NA	12200	6320	10600
Antimony	0.6	<21.3	<21.0	<21.0
Barium	200	116	75.1	102
Beryllium	0.4	0.613	<2.42	0.756
Calcium	NA	90900	100000	61400
Chromium	10	7.27	<40.4	<37.4
Cobalt	NA	2.72	2.90	3.11
Copper	NA	7.27	2.18	2.24
Iron	NA	7.27	5.66	6.73
Magnesium	NA	5970	5860	9300
Manganese	NA	1630	1930	1800
Molybdenum	NA	190	221	303
Nickel	10	1.31	1.78	1.42
Potassium	NA	5.96	57.9	196
Silver	NA	815	1020	618
Sodium	51.1	<4.38	<4.04	<3.74
Vanadium	NA	56.0	88.6	90.7
Zinc	NA	19.6	12.4	17.7
		20.0	33.7	65.7
ARSENIC TOTAL BY GFAA/SW 7648 (mg/kg)				
Arsenic	3.27	0.714	0.663	1.27
LEAD TOTAL BY GFAA/SW 7421 (mg/kg)				
Lead	1.5	22.4	14.4	21.9
MERCURY TOTAL BY CYAA/SW 7421 (mg/kg)				
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/kg)				
Selenium	5.0	<2.19	<2.05	<1.96
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9248/NONE (mg/kg)				
Toluene	100	0.00699	0.000569	0.0104
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9276/SW3559 (mg/kg)				
Di-n-butylphthalate	1020	<0.411	<0.370	<0.366
Fluoranthene	409	0.0440	<0.370	<0.366
Pyrene	310	0.0342	<0.370	<0.366
Total PAHs		0.0782	ND	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

Results in boxes exceed background concentration and MSC value

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospac Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carlwell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Sample ID: Sample Date: Depth: Notes:	OT38368A 22-OCT-95 0.0' - 2.0'	OT38378A 22-OCT-95 0.0' - 2.0'	OT38385A 22-OCT-95 0.0' - 2.0'	OT38393A 22-OCT-95 0.0' - 2.0'	OT38405A 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)						
623-9045 pH units Soil		7.67	7.71	7.18	7.58	7.26
PERCENT SOLID - D2116/NONE (percent)						
623-D2216 Moisture		10.0	13.0	11.0	11.0	10.0
METALS TOTAL BY ICP/ASW/6103W/1859 (mg/kg)						
Aluminum	NA	7090	9770	7480	10100	5120
Antimony	0.6	2.19 JQ	<21.6	<20.6	<21.0	1.98 JL
Barium	200	77.0	79.1	85.9	92.2	74.1 J
Beryllium	0.4	<2.43	0.605	<2.48	0.587	<2.47
Calcium	NA	149000	104000	182000	117000	165000
Chromium	10	<40.6	8.47	<41.3	8.39	14.8 JQ
Cobalt	NA	2.68 JQ	2.76 JQ	2.81 JQ	2.77 JQ	2.14 J
Copper	NA	6.49 JQ	7.17	4.13 JQ	4.70	14.8 J
Iron	NA	7980	10200	10400	8000	20000
Magnesium	NA	2150	2380	2270	2110	1880
Manganese	NA	408	283	368	231	476
Molybdenum	NA	3.00 JQ	<4.32	<4.13	<4.20	4.03 JL
Nickel	10	214	8.73	7.38	7.38	222
Potassium	NA	867	1790	1300	1090	1070
Silver	51.1	<4.06	<4.32	<4.13	<4.20	<4.12 J
Sodium	NA	112	88.8	129	79.5	426
Vanadium	NA	20.4	19.6	19.1	21.6	10.4
Zinc	NA	73.8	19.3	76.7	14.3	106 J
ARSENIC TOTAL BY GF/ASW/7648 (mg/kg)						
Arsenic	3.27	1.37	2.05	1.94	1.81	2.87 JL
LEAD TOTAL BY GF/ASW/7431 (mg/kg)						
Lead	1.5	22.4	11.0	14.9	11.2	1030
SELENIUM TOTAL BY GF/ASW/7740/METHOD (mg/kg)						
Selenium	5.0	<2.03	0.0664 JL	<0.429 JL	0.0829 JL	<0.424 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)						
Toluene	100	0.00703	0.000491 JQ	0.000812 JQ	0.000825 JQ	0.00125 JQ
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW92705W/3559 (mg/kg)						
Acenaphthene	613	<0.369	<0.378	<0.371	<0.372	<0.364
Anthracene	3070	<0.369	<0.378	<0.371	<0.372	<0.364
Benzo(a)anthracene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Benzo(a)pyrene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Benzo(b)fluoranthene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Benzo(g,h,i)perylene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Benzo(k)fluoranthene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Chrysene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Di-n-butylphthalate	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Dibenz(a,h)anthracene	1020	<0.369	<0.378	<0.371	<0.372	<0.364
Fluoranthene	NA	<0.369	<0.378	<0.371	<0.372	<0.364
Fluorene	409	<0.369	<0.378	<0.371	<0.372	<0.364
Indeno(1,2,3-cd)pyrene	409	<0.369	<0.378	<0.371	<0.372	<0.364
Phenanthrene	NA	<0.369	<0.378	<0.371	<0.372	<0.364

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Airport Mesa Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNIT)	MSC	Sample ID Sample Date Depth Notes	OT3836SA 22-OCT-95 0.0' - 2.0'	OT3837SA 22-OCT-95 0.0' - 2.0'	OT3838SA 22-OCT-95 0.0' - 2.0'	OT3839SA 22-OCT-95 0.0' - 2.0'	OT3840SA 22-OCT-95 0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (mg/kg) cont'd.							
Pyrene	310		<0.369	<0.378	<0.371	<0.372	0.0732 JH
benz-Ethylphenylphthalate	2.04		<0.369	<0.371	<0.371	<0.372	<0.364
Total PAHs			ND	ND	ND	ND	0.0732

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Sample ID: Sample Date: Depth: Notes:	OT38413A 22-OCT-95 0.0' - 2.0'	OT38425A 22-OCT-95 0.0' - 2.0'	FDUP-04 22-OCT-95 0.0' - 2.0' Duplicate of OT38425A	OT38435A 22-OCT-95 0.0' - 2.0'	OT38445A 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none) 623-9045 pH units Soil		7.76	7.58	7.52	7.67	7.55
PERCENT SOLID - D1116/NONE (percent) 623-D2216 Moisture		9.00	12.0	3.00 J	11.0	10.0
METALS TOTAL BY ICP/SW6105/SW1659 (mg/kg)						
Aluminum	NA	6050	11600 J	7900 J	8860	8120
Antimony	0.6	<18.1	1.97 JQ	2.44 JQ	<19.9	<20.7
Barium	200	58.0	103	78.2	94.8	81.2
Beryllium	0.4	<2.32	1.58 JQ	0.610 J	<2.39	1.66 JQ
Calcium	NA	157000	116000	97400	113000	186000
Chromium	10	<8.7	10.3 JQ	7.38	<9.8	8.29 JQ
Cobalt	NA	2.17 JQ	3.94	2.78 JQ	2.95 JQ	2.90 JQ
Copper	NA	6.19 JQ	10.3 JQ	7.14	11.2	3.32 JQ
Iron	NA	6530	11800 J	7260 J	9180	11200
Magnesium	NA	2100	2660	2260	2100	2510
Manganese	NA	323	527 J	318 J	403	455
Molybdenum	NA	1.39 JQ	1.97 JQ	1.31 JQ	1.91 JQ	2.40 JQ
Nickel	10	203	60.8	7.93	59.1	224
Potassium	NA	891	2190 J	1420 J	1250	1920
Silver	51.1	<3.62	<3.94	<4.36	<3.98	<4.14
Sodium	NA	109	338 J	77.9 J	101	288
Vanadium	NA	18.1	21.0	18.2	19.9	17.1
Zinc	NA	67.5	37.6 J	18.3 J	31.6	87.0
ARSENIC TOTAL BY GFAA/SW 7649 (mg/kg) Arsenic	3.27	1.04	2.42	1.18	2.60	2.36
LEAD TOTAL BY GFAA/SW 7481 (mg/kg) Lead	1.5	11.6	20.9	25.4	27.5	29.0
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/kg) Selenium	5.0	<2.02 JL	<0.427	<2.11	<2.06	<0.421
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW6105/NONE (mg/kg) Toluene	100	0.0194	0.00832	0.00304 JQ	<0.00558	0.00873
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW6105/SW3559 (mg/kg)						
Acenaphthene	613	<0.361	<0.374	<0.379	<0.371	<0.364
Anthracene	3070	<0.361	<0.374	<0.379	<0.371	<0.364
Benz(a)anthracene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Benz(a)pyrene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Benz(b)fluoranthene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Benz(g,h,i)perylene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Benzofluoranthene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Chrysene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Di-n-butylphthalate	1020	<0.361	<0.374	<0.379	<0.371	<0.364
Dibenz(a,h)anthracene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Fluoranthene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Indeno(1,2,3-cd)pyrene	409	<0.361	<0.374	0.0236 JQ	<0.371	0.0340 JQ
Phenanthrene	NA	<0.361	<0.374	<0.379	<0.371	<0.364
Phenanthrene	NA	<0.361	<0.374	<0.379	<0.371	<0.364

POSITIVE ANALYTICAL RESULTS

PARAMETER/METHOD (UNIT)						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (mg/kg) cont'd.						
	Sample ID:	OT3841SA	OT3842SA	FDUP-04	OT3843SA	OT3844SA
	Sample Date:	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
	Depth:	0' - 2.0'	0' - 2.0'	0' - 2.0'	0' - 2.0'	0' - 2.0'
	Notes:			Duplicate of OT3842SA		
Pyrene	310	<0.361	<0.374	<0.379	<0.371	0.0269 RQ
benz(2-Ethylhexyl)phthalate	2.04	<0.361	<0.374	<0.379	<0.371	<0.364
Total PAHs		ND	ND	0.0736	ND	0.0609

PARAMETER/METHOD (UNITS)

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (mg/kg) cont'd.

Pyrene

bis(2-Ethylhexyl)phthalate

Total PAHs

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

 $\hat{I} = \text{Estimated cumulation based upon OC data}$

BLB = Estimated cost per unit of BLB

MM = Estimated concentration; possible bias and bias correction factor

and upon the basis of the following assumptions:

U.L. = Estimated quantization possibly biased low or a false negative based upon QC data

$\hat{Q}Q$ = Estimated quantitation, detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

☐ Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

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TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)						
MSC	Sample ID :	OT3848SA	OT3848SA	OT3848SA	OT3848SA	FDUP-05
	Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
	Notes :					Duplicate of OT3848SA
SOIL pH - SW9445/NONE (none)						
	623-9045 pH units Soil	7.81	7.71	7.14	7.59	7.72
PERCENT SOLID - D3116 /NONE (percent)						
	623-D2216 Moisture	16.0	10.0	13.0	16.0	17.0
METALS TOTAL BY ICP/MSW 6918/SW33059 (mg/kg)						
NA	Aluminum	13000	6110	6300	10700	7970
0.6	Antimony	<22.9	2.49 JQ	<19.3	<22.7	2.79 JQ
200	Barium	88.9	82.4	71.9	83.6	82.0
0.4	Beryllium	0.733	<2.33	<2.31	<2.73	<2.46
NA	Calcium	121000	179000	109000	139000	138000
10	Chromium	10.8	<38.6	<38.6	<45.4	<41.0
NA	Cobalt	4.03 JQ	3.57 JQ	2.31 JQ	4.00 JQ	4.10
NA	Copper	8.79	6.99	9.25 JQ	17.3 JQ	13.1 JQ
NA	Iron	12700	7470	6230	13200	10900
NA	Magnesium	3150	2350	1920	2800	2420
NA	Manganese	364	474	318	479	512
NA	Molybdenum	2.20 JQ	1.79 JQ	1.46 JQ	2.91 JQ	1.80 JQ
10	Nickel	9.71	206	154	242	219
NA	Potassium	2490	1030	927	1770	1430
51.1	Silver	<4.58	<3.88	<3.86	<4.54	<4.10
NA	Sodium	273	110	78.9	103	95.0
NA	Vanadium	17.5	24.1	15.4	23.3	21.4
NA	Zinc	28.1	68.5	89.5	204	218
ARSENIC TOTAL BY GF/AA/SW 7468 (mg/kg)						
3.27	Arsenic	2.57	1.96	0.982 J	3.33 J	5.48 J
LEAD TOTAL BY GF/AA/SW 7431 (mg/kg)						
1.5	Lead	19.6	38.4	128	580	722
SELENIUM TOTAL BY GF/AA/SW 7748/METHOD (mg/kg)						
5.0	Selenium	<0.434	<1.90 JL	<2.18	<2.19 JL	<2.08 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7140/NONE (mg/kg)						
100	Toluene	0.00109 JQ	0.00110 JQ	0.00195 JQ	0.00663	0.00615 JQ
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7140/SW3359 (mg/kg)						
613	Acenaphthene	<0.394	<0.366	<0.379	<0.392	<0.397
3070	Anthracene	<0.394	<0.366	<0.379	<0.392	<0.397
NA	Benzo(a)anthracene	<0.394	<0.366	0.0637 JQ	<0.392	<0.397
NA	Benzo(b)fluoranthene	<0.394	<0.366	<0.379	<0.392	<0.397
NA	Benzo(g,h,i)perylene	<0.394	<0.366	0.0644 JQ	<0.392	<0.397
NA	Benzo(k)fluoranthene	<0.394	<0.366	<0.379	<0.392	<0.397
NA	Chrysene	<0.394	<0.366	<0.379	<0.392	<0.397
1020	Di-n-butylphthalate	<0.394	<0.366	0.0705 JQ	<0.392	<0.397
NA	Dibenz(a,h)anthracene	<0.394	<0.366	0.0254 JQ	<0.392	<0.397
409	Fluorene	<0.394	<0.366	<0.379	<0.392	<0.397
409	Fluoranthene	<0.394	<0.366	0.130 JQ	0.0396 JQ	0.0688 JQ
NA	Indeno(1,2,3-cd)pyrene	<0.394	<0.366	<0.379	<0.392	<0.397
NA	Phenanthrene	<0.394	<0.366	<0.179	<0.392	0.0266 JQ

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Sample ID Sample Date Depth Notes	OT3845SA 22-OCT-95 0.0' - 2.0'	OT3846SA 22-OCT-95 0.0' - 2.0'	OT3847SA 22-OCT-95 0.0' - 2.0'	OT3848SA 22-OCT-95 0.0' - 2.0'	FDUP-05 22-OCT-95 0.0' - 2.0'
MSC						
Pyrene	310	<0.394	<0.366	0.142	0.0549 IQ	0.0795 IQ
ben(2-Ethylphenyl)phthalate	2.04	<0.394	<0.366	<0.379	0.136 IQ	<0.397
Total PAHs		ND	ND	0.5149	0.0945	0.1749

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW1550 (mg/kg) cent'd.

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

IQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

☐ Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aerospac Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)		Sample ID : Sample Date : Depth : Notes :	OT38498A 22-OCT-95 0.0' - 2.0'	OT38498A 23-OCT-95 0.0' - 2.0'	OT38518A 23-OCT-95 0.0' - 2.0'
MSC			Sample	Sample	Sample
SOIL pH - SW9945/NONE (none)					
623-9045 pit units Soil			7.76	7.70	7.33
PERCENT SOLID - D2116/NONE (percent)					
623-D2116 Moisture			4.00	12.0	6.00
METALS TOTAL BY ICP/MSW/60103W/3559 (mg/kg)					
Aluminum	NA		2550	5120	3650
Antimony	0.6		<18.1	1.99 JL	<18.0
Barium	200		28.9	57.2	53.1
Beryllium	0.4		<2.17	<2.60	0.216
Calcium	NA		180000	170000	75900
Chromium	10		<36.2	<43.4	10.8
Cobalt	NA		1.66 JQ	2.17 JQ	3.45 JQ
Copper	NA		<36.2	6.07 JQ	6.90
Iron	NA		4740	7040	5110
Magnesium	NA		1650	2000	1080
Manganese	NA		338	346	229
Molybdenum	NA		<0.62	1.91 JL	<0.60
Nickel	10		191	230	5.75
Potassium	NA		653	1160	967 JH
Silver	51.1		<0.62	<4.34	0.431 JQ
Sodium	NA		173	135	75.9 JB
Vanadium	NA		8.68	14.5	12.2
Zinc	NA		62.8	110	43.1
ARSENIC TOTAL BY GFAA/MSW 7659 (mg/kg)					
Arsenic	3.27		2.25	2.31 JL	1.69
LEAD TOTAL BY GFAA/MSW 7421 (mg/kg)					
Lead	1.5		13.9	52.3	96.3
SELENIUM TOTAL BY GFAA/MSW 7749/METHOD (mg/kg)					
Selenium	5.0		<0.386 JL	<0.424 JL	<0.400
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SWB246/NONE (mg/kg)					
Toluene	100		0.00763	0.000918 JQ	0.0302
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SWB246/MSW3559 (mg/kg)					
Acenaphthene	613		<0.345	<0.376	0.0605 JQ
Acridene	3070		<0.345	<0.376	0.128 JQ
Benzo(a)anthracene	NA		<0.345	<0.376	0.449
Benzo(a)pyrene	NA		<0.345	<0.376	0.479 J
Benzo(b)fluoranthene	NA		<0.345	<0.376	0.442 J
Benzo(g,h,i)perylene	NA		<0.345	<0.376	0.129 J
Benzo(k)fluoranthene	NA		<0.345	<0.376	0.593 J
Chrysene	NA		<0.345	<0.376	0.399
Di-n-butylphthalate	1020		<0.345	<0.376	0.0282 JQ
Dibenz(a,h)anthracene	NA		<0.345	<0.376	0.107 J
Fluoranthene	409		<0.345	<0.376	0.658
Fluorene	409		<0.345	<0.376	0.0442 JQ
Indeno(1,2,3-cd)pyrene	NA		<0.345	<0.376	0.264 J
Phenanthrene	NA		<0.345	<0.376	0.508

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Aeromarine Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID :		
		Sample Date :	OT3849SA 22-OCT-95 0.0' - 2.0'	OT3851SA 23-OCT-95 0.0' - 2.0'
		Depth :	Background	Background
		Notes :	Sample	Sample
Pyrene	310		<0.345	0.910
benz(2-Ethylthio)phthalate	2.04		<0.345	0.237 IQ
Total PAHs			ND	5.17

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

IB = Estimated quantitation; possibly biased high or a false positive based upon blank data

JH = Estimated quantitation; possibly biased high based upon QC data

IL = Estimated quantitation; possibly biased low or a false negative based upon QC data

IQ = Estimated quantitation; detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

☐ Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

PREPARED/DATE: John Pecore / 2-22-96

CHECKED/DATE: Sue D. Max / 2-22-96

A high degree of variability was observed between the concentrations reported for several metals in the two site-specific background samples. Based on this observation, the background concentrations used for data comparison in the following section may not be representative of basewide background concentrations.

3.1.2 Data Summary

The analytical results for the Aerospace Museum Site are discussed by chemical class below.

Volatile Organic Compounds - Methylene chloride and toluene were detected in soil samples collected at this site. Methylene chloride was detected in one soil sample, OT3804SA, however the result was less than the PQL. Toluene was detected in both background soil samples. Background sample OT3851SA contained 0.0302 mg/kg of toluene and OT3850SA contained toluene at a concentration less than the PQL. Toluene was detected in 44 of 51 samples analyzed as depicted in Figure 3-1, however, 27 results were reported at concentrations less than the PQL. The maximum concentration of toluene was 0.0302 mg/kg, reported in background sample OT3851SA. Toluene was reported throughout the site in concentrations ranging from nondetect to 0.0194 mg/kg at OT3841SA. The detection of toluene in background samples may be indicative of the presence of a source unrelated to the Aerospace Museum Site.

Semi-Volatile Organic Compounds - Semi-volatile constituents detected in soil samples included acenaphthene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, butyl benzyl phthalate, chrysene, di-n-butylphthalate, dibenz(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and bis(2-ethylhexyl)phthalate. Semi-volatiles were not detected in background sample OT3850SA; however, background sample OT3851SA contained acenaphthene, anthracene, di-n-butylphthalate, fluorene, and bis(2-ethylhexyl)phthalate at concentrations below the PQL, and low concentrations of benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

Polynuclear aromatic hydrocarbons (PAHs) were detected in 20 soil samples out of 49 samples collected at the site as depicted in Figure 3-2. The highest concentrations of PAHs encountered were collected from the northern third of the site and included samples OT3801SA, OT3814SA, and background sample OT3851SA. Dibenzofuran was also detected in samples OT3801SA and OT3814SA. The maximum concentration of total PAHs reported was 46.42 mg/kg, at OT3801SA, collected adjacent to Farmer's Branch. A second area exhibiting lower levels of PAHs was identified in the vicinity of sample OT3847SA, on the south side of the site.

Phthalates were detected in several soil samples, however, butyl benzyl phthalate and di-n-butylphthalate were detected only at concentrations below the PQL. Bis(2-ethylhexyl)phthalate was detected in five samples, including background sample, OT3851SA. The maximum concentration reported was 1.09 mg/kg at OT3804SA, on the northwest edge of the site.

Metals - Metals detected in soil samples include aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, selenium, silver, sodium, vanadium, and zinc. All of these metal constituents were detected at one or both background locations with the exception of selenium and cadmium. The following metals were detected at the site at concentrations greater than the background concentration:

- Aluminum results exceeded the maximum background concentration of 5,120 mg/kg at 40 of 49 sample locations. The maximum sample concentration reported was 20,800 mg/kg at OT3824SA.
- Antimony results exceeded the maximum background concentration of 1.99 mg/kg at 10 of 49 sample locations, as depicted in Figure 3-3. The maximum sample concentration reported was 2.79 mg/kg at OT3848SA. The remaining locations exceeding the background concentration are distributed across the site.
- Arsenic results exceeded the maximum background concentration of 2.31 mg/kg at 13 of 49 sample locations as depicted in Figure 3-4. The maximum sample concentration reported was 5.48 mg/kg at OT3848SA on the southwest edge of the site. The remaining locations exceeding the background concentration are distributed across the site.

- Barium results exceeded the maximum background concentration of 57.2 mg/kg at 47 of 49 sample locations as depicted in Figure 3-5. The maximum sample concentration reported was 6,730 mg/kg at OT3835SA. All other samples were reported with concentrations less than 200 mg/kg.
- Beryllium results exceeded the maximum background concentration of 0.216 mg/kg at 27 of 49 sample locations as depicted in Figure 3-6. The maximum sample concentration reported was 1.72 mg/kg at OT3825SA located on the eastern edge of the site. Additional locations exceeding the background concentration are distributed across the site.
- Cadmium was detected at two locations, OT3806SA and OT3809SA, at concentrations of 0.972 mg/kg and 0.843 mg/kg, respectively. These locations are depicted in Figure 3-7. Background samples were analyzed for cadmium, but no cadmium was detected.
- Calcium results exceeded the maximum background concentration of 170,000 mg/kg at 13 of 49 sample locations. The maximum sample concentration reported was 285,000 mg/kg at OT3817SA. Additional locations exceeding the background concentration are distributed across the site.
- Chromium results exceeded the maximum background concentration of 10.8 mg/kg at 18 of 49 sample locations, as depicted in Figure 3-8. The maximum sample concentration reported was 40.8 mg/kg at OT3801SA located on the northeast edge of the site.
- Cobalt results exceeded the maximum background concentration of 3.45 mg/kg at 22 of 49 sample locations, however many of the results were less than the PQL. The maximum sample concentration reported was 7.49 mg/kg at OT3810SA located on the north side of the site.
- Copper results exceeded the maximum background concentration of 6.90 mg/kg at 27 of 49 sample locations. The maximum sample concentration reported was 24.8 mg/kg at OT3801SA located on the northeast edge of the site.
- Iron results exceeded the maximum background concentration of 7,040 mg/kg at 34 of 49 sample locations. The maximum sample concentration reported was 20,000 mg/kg at OT3840SA located on the southeast edge of the site.

- Lead results exceeded the maximum background concentration of 96.3 mg/kg at 4 of 49 sample locations. Lead exceeded the secondary background concentration of 52.3 mg/kg at one additional location, as depicted in Figure 3-9. The maximum sample concentration reported was 1,030 mg/kg at OT3840SA located on the southeast edge of the site. Two adjacent sample locations, OT3847SA and OT3848SA, were reported with concentrations of 128 mg/kg and 722 mg/kg, respectively. One additional location OT3801SA, on the northeast edge of the site, was reported with a lead concentration of 227 mg/kg.
- Magnesium results exceeded the maximum background concentration of 2,000 mg/kg at 30 of 49 sample locations. The maximum concentration reported was 3,200 mg/kg at OT3824SA located on the west edge of the site.
- Manganese results exceeded the maximum background concentration of 346 mg/kg at 32 of 49 sample locations. The maximum concentration reported was 678 mg/kg at OT3822SA located in the central portion of the site.
- Molybdenum results exceeded the maximum background concentration of 1.91 mg/kg at 20 of 40 sample locations, however many of the results were less than the PQL. The maximum concentration reported was 4.03 mg/kg at OT3840SA, located on the southeast edge of the site.
- Nickel results exceeded the maximum background concentration of 230 mg/kg at one location, OT3848SA, which was reported at 242 mg/kg. All results exceeded the secondary background concentration of 5.75 mg/kg, as depicted in Figure 3-10. Nickel concentrations across the site range from less than 10 mg/kg to 229 mg/kg.
- Potassium results exceeded the maximum background concentration of 1,160 mg/kg at 30 of 49 sample locations. The maximum concentration reported was 2,740 mg/kg at OT3824SA, located on the west edge of the site.
- Selenium was detected at six locations, with a maximum concentration of 0.143 mg/kg at OT3830SA, located in the central portion of the site. Background samples were analyzed for selenium, but no selenium was detected.
- Silver was not detected above the PQL at any sample location.

- Sodium results exceeded the maximum background concentration of 135 mg/kg at 13 of 49 sample locations. The maximum concentration reported was 426 mg/kg at OT3840SA, located on the southeast edge of the site.
- Vanadium results exceeded the maximum background concentration of 14.5 mg/kg at 39 of 49 sample locations. The maximum concentration reported was 28.5 mg/kg at OT3829SA, located on the east edge of the site.
- Zinc results exceeded the maximum background concentration of 110 mg/kg at 2 of 49 sample locations. Results exceeded the secondary background concentration of 43.1 mg/kg at 22 of 49 locations. The maximum concentration reported was 204 mg/kg at OT3848SA, located on the southwest edge of the site.

3.2 GROUNDS MAINTENANCE YARD

The following section discusses the chemical constituents detected in soil samples collected from the Grounds Maintenance Yard. Twenty-eight soil samples, two background samples, and three field duplicate samples were collected. The positive analytical results are presented in Table 3-2. This table also indicates which results were reported at concentrations exceeding the TNRCC MSC value for organic constituents, or the maximum background concentration and MSC value, for metal constituents. Constituents for which MSC criteria apply are also depicted on the associated figures to aid in the interpretation of the data.

3.2.1 Background Levels

Site-specific background levels of metals were determined from samples collected from two background locations adjacent to the site, OT3901SA, located to the south, and OT3902SA, located to the north (Figure 2-2). Sample data were compared to the maximum values obtained from the background samples. The secondary background sample was used when the maximum background concentrations were greater than the concentrations reported at the site. This occurred for four metals, beryllium, iron, nickel, and potassium. Both background samples

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID: Sample Date: Depth: Notes:	OT39018A 23-OCT-95 0.0' - 2.0' Background Sample	OT39025A 23-OCT-95 0.0' - 2.0' Background Sample	OT39035A 23-OCT-95 0.0' - 2.0'	OT39045A 23-OCT-95 0.0' - 2.0'	OT39055A 23-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none) 623-9045 pH units Soil	-		7.49	7.81	7.65	7.66	7.72
PERCENT SOLID - D2116/NONE (percent) 623-D2216 Moisture	-		13.0	16.0	20.0	17.0	16.0
METALS TOTAL BY ICP/ASW/6810/ASW/3654 (mg/kg)							
Aluminum	NA		7850	9440	7090	4370	4300
Antimony	0.6		<19.8	<21.0	<23.0	<22.3	<22.7
Barium	200		95.3	122	121	170	118
Beryllium	0.4		0.634	<2.51	0.551	<2.68	<2.73
Calcium	NA		19000	106000	108000	234000	204000
Chromium	10		9.28	<41.9	2.85 JQ	14.3 JQ	32.7 JQ
Cobalt	NA		3.57 JQ	2.77 JQ	3.22 JQ	2.14 JQ	2.27 JQ
Copper	NA		9.04	5.87 JQ	8.91	8.03 JQ	19.1
Iron	NA		10800	7090	6680	4200	5410
Magnesium	NA		1790	2370	2390	2250	1420
Manganese	NA		333	334	315	384	340
Molybdenum	NA		1.43 JQ	1.59 JQ	<4.60	<4.46	1.91 JQ
Nickel	10		8.72	114	7.35	235	242
Potassium	NA		2170 JH	1480	1500	1100 JH	1010
Sodium	NA		52.0 JB	70.6	87.9	151	349
Vanadium	NA		15.4	17.4	9.93	6.87	9.64
Zinc	NA		20.4	44.2	17.3	78.5	99.0
ARSENIC TOTAL BY GF/ASW 7649 (mg/kg)							
Arsenic	3.27		2.23	1.82	1.95	1.47	1.61
LEAD TOTAL BY GF/ASW 7431 (mg/kg)							
Lead	1.5		12.4	10.1	15.5 JH	5.87	71.9
SELENIUM TOTAL BY GF/ASW 7740/METHOD (mg/kg)							
Selenium	5.0		<0.426 JL	<2.16	<2.35 JL	<2.18 JL	<0.454
ORGANOCHLORINE PESTICIDES AND PCBs - SW7000/SW/3554 (mg/kg)							
4,4'-DDD	0.119		<0.0382	<0.0400	<0.0412	<0.0413	<0.0400
4,4'-DDE	0.0841		<0.00153	<0.00160	<0.00165	<0.00165	<0.00160
AR1254	0.05		<0.0382	<0.0400	<0.0412	<0.0413	<0.0400
Chlordane	0.2		<0.0191	<0.0200	<0.0206	<0.0206	<0.0200
Dieldrin	0.00179		<0.000764	<0.000800	<0.000824	0.000873	<0.000800
Methoxychlor	4.00		<0.0191	<0.0200	<0.0206	<0.0206	<0.0200
CHLORINATED HERBICIDES - SW7150/METHOD (mg/kg)							
2,4,5-TP (Silvex)	5.00		<0.00460	<0.00454	<0.00482	<0.00498	<0.00482
MCP	NA		<3.45	<3.40	<3.62	<3.74	4.05
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7140/NONE (mg/kg)							
Acetone	1020		<0.0118	<0.0117 J	<0.0124 J	<0.0121	<0.0119 J
Carbon disulfide	23.4		<0.00591	<0.00586	<0.00619	<0.00604	<0.00596
Methylene chloride	0.5		<0.00591	<0.00586	<0.00619	<0.00604	<0.00596
Toluene	100		0.00503 JQ	<0.00586	0.0140	<0.00604	0.0165

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Greenwood Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)										
MSC	Sample ID :	OT3901SA	OT3902SA	OT3903SA	OT3904SA	OT3905SA				
	Sample Date :	23-OCT-95	23-OCT-95	23-OCT-95	23-OCT-95	23-OCT-95				
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'				
	Notes :	Background	Background							
		Sample	Sample							
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270-SW1559 (mg/kg)										
2-Methylnaphthalene	NA	<0.380	<0.391	<0.412	<0.400	<0.393				
Acenaphthene	613	<0.380	<0.391	<0.412	<0.400	0.164 JQ				
Anthracene	3070	<0.380	<0.391	<0.412	<0.400	0.572				
Benzo(a)anthracene	NA	<0.380	<0.391	<0.412	<0.400	3.98				
Benzo(a)pyrene	NA	<0.380 J	<0.391	<0.412	<0.400 J	4.58				
Benzo(b)fluoranthene	NA	<0.380 J	<0.391	<0.412	<0.400 J	6.11				
Benzo(g,h)perylene	NA	<0.380 J	<0.391	<0.412	<0.400 J	3.48				
Benzo(k)fluoranthene	NA	<0.380 J	<0.391	<0.412	<0.400 J	2.11				
Chrysene	NA	<0.380	<0.391	<0.412	<0.400 J	3.51				
Di-n-butylphthalate	1020	0.0276 JQ	<0.391	<0.412	<0.400	0.0688 JQ				
Dibenz(a,h)anthracene	NA	<0.380 J	<0.391	<0.412	<0.400 J	0.931				
Fluoranthene	409	<0.380	<0.391	<0.412	<0.400	4.83				
Fluorene	409	<0.380	<0.391	<0.412	<0.400	0.117 JQ				
Indeno(1,2,3-cd)pyrene	NA	<0.380 J	<0.391	<0.412	<0.400 J	3.01				
Naphthalene	409	<0.380	<0.391	<0.412	<0.400	<0.393				
Phenanthrene	NA	<0.380	<0.391	<0.412	<0.400	2.26				
Pyrene	310	<0.380	<0.391	<0.412	<0.400 J	6.29				
ben(2-Ethylhexyl)phthalate	2.04	<0.380	<0.391	<0.412	<0.400 J	2.35				
Total PAHs		ND	ND	ND	ND	41.01				

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Data rejected based upon QC data: do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID: Sample Date: Depth:	OT3907SA 23-OCT-95 0.0' - 2.0'	OT3908SA 24-OCT-95 0.0' - 2.0'	OT3909SA 24-OCT-95 0.0' - 2.0'	OT3910SA 23-OCT-95 0.0' - 2.0'	OT3911SA 23-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)							
623-9045 pH units Soil			7.61	7.90	7.67	7.77	7.66
PERCENT SOLID - D2116/NONE (percent)							
623-D2216 Moisture			23.0	18.0	17.0	16.0	21.0
METALS TOTAL BY ICP/ASW/6105/SW3050 (mg/kg)							
Aluminum	NA		5140	4580	5260	3880	7000
Antimony	0.6		<23.9	<22.8	2.25 JQ	<22.4	<24.0
Barium	200		179	152	150	166	183
Beryllium	0.4		<2.86	<2.73	<2.60	<2.68	<2.88 J
Calcium	NA		296000	269000	270000	281000	177000
Chromium	10		<47.8	<45.5	21.7 JQ	<44.8	19.2 JQ
Cobalt	NA		1.15	1.36 JQ	2.17 JQ	2.42 JQ	3.16 JQ
Copper	NA		24.8 JQ	7.28 JQ	4.34 JQ	4.48 JQ	9.59 JQ
Iron	NA		4550	3750	5470	4580	6830
Magnesium	NA		1770	1420	1860	2080	2260
Manganese	NA		271	271	379	447	493
Molybdenum	NA		1.43 JQ	<4.55	<4.34	1.52 JQ	2.30 JQ
Nickel	10		153	239 JH	231	238	257
Potassium	NA		869	831	995	792	1930
Sodium	NA		180	130 JB	109 JB	454	400
Vanadium	NA		8.40	4.64	8.41	7.70	9.11
Zinc	NA		53.2	75.5	93.0	76.0	112
ARSENIC TOTAL BY GF/ASW 7640 (mg/kg)							
Arsenic	3.27		0.801	0.456	2.11	1.87	2.05
LEAD TOTAL BY GF/ASW 7411 (mg/kg)							
Lead	1.5		10.1	5.92	23.6	6.59	20.2
SELENIUM TOTAL BY GF/ASW 7740/METHOD (mg/kg)							
Selenium	5.0		0.310 JQ	0.478 JQ	0.562 JQ	0.488 JQ	<0.469
ORGANOCHLORINE PESTICIDES AND PCBs - SW9800/SW3550 (mg/kg)							
4,4'-DDD	0.119		<0.00405	<0.00403	<0.00397	<0.00405	<0.00413
4,4'-DDE	0.0841		<0.00162	<0.00161	0.00792	<0.00162	<0.00165
AR1254	0.05		<0.0405	<0.0403	0.161	<0.0405	<0.0413
Chlordane	0.2		<0.0202	<0.0202	<0.0198 R	<0.0202	<0.0206
Dieldrin	0.00179		<0.000810	<0.000806	<0.000794	0.000827	<0.000826
Methoxychlor	4.00		<0.0202	<0.0202	<0.0198	<0.0202	<0.0206
CHLORINATED HERBICIDES - SW9150/METHOD (mg/kg)							
2,4,5-TP (Shex)	5.00		<0.00494	<0.00488	<0.00482	<0.00486	0.00551
MCPP	NA		<3.70	<3.66	<3.62	<3.64	<3.72
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9140/NONE (mg/kg)							
Acetone	1020		<0.0121 J	<0.0121	<0.0123	<0.0120 J	<0.0123 J
Carbon disulfide	23.4		<0.00606	0.00610 JQ	<0.00617	<0.00602	<0.00614
Methylene chloride	0.5		0.00410	<0.00606	<0.00617	<0.00602	<0.00614
Toluene	100		0.000727	0.00501 JQ	0.00546 JQ	0.00570 JQ	0.0112

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)									
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3559 (mg/kg)									
	Sample ID :	OT3906SA	OT3907SA	OT3908SA	OT3909SA	OT3910SA	OT3911SA		
	Sample Date :	23-OCT-95	23-OCT-95	24-OCT-95	24-OCT-95	23-OCT-95	23-OCT-95		
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'		
	Notes :								
MSC									
					</				

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data: do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals).

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID Sample Date Depth Notes	FDUP-06 21-OCT-95 0.0' - 2.0'	OT3912SA 24-OCT-95 0.0' - 2.0'	OT3913SA 23-OCT-95 0.0' - 2.0'	OT3914SA 24-OCT-95 0.0' - 2.0'	OT3915SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9445/NONE (none)							
623-9045 pH units Soil	-		7.69	7.31	7.70	7.65	7.70
PERCENT SOLID - D2216/NONE (percent)							
623-D2216 Moisture	-		18.0	19.0	18.0	19.0	17.0
METALS, TOTAL BY ICP/MS/6016/SW3658 (mg/kg)							
Aluminum	NA		6890	4620	5790	6280	5950
Antimony	0.6		<22.6	<20.7	<21.1 JL	2.97 JQ	<22.3
Barium	200		177	172	182	167	161
Beryllium	0.4			<2.49	<2.65		<2.68
Calcium	NA			219000	232000	196000	197000
Chromium	10			9.95 JQ	<44.2	<46.4	8.03 JQ
Cobalt	NA			<45.2 J	2.03 JQ	2.31 JQ	1.78 JQ
Copper	NA			2.89 JQ	7.46 JQ	12.1 JQ	8.03 JQ
Iron	NA			9.03 JQ	4390	5300	5160
Magnesium	NA			6710	4090	2000	1830
Manganese	NA			2200	2100	332	302
Molybdenum	NA			477	406	<4.64	<4.46
Nickel	10			2.17 JQ	1.86 JL	289	240
Potassium	NA			241	236	1390	991
Sodium	NA			1880	1120	146 JB	134 JB
Vanadium	NA			403	342	6.96	6.78
Zinc	NA			9.12	5.83	8.11	75.4
	NA			122	75.1		
ARSENIC, TOTAL BY GFAA/SW 7640 (mg/kg)							
Arsenic	3.27		1.82	<0.460	0.926	0.989	0.760 JH
LEAD, TOTAL BY GFAA/SW 7421 (mg/kg)							
Lead	1.5		17.3	10.1	6.66	8.48	9.19
SELENIUM, TOTAL BY GFAA/SW 7740/METHOD (mg/kg)							
Selenium	5.0		<0.462	0.599 JQ	<0.452 JL	0.617 JL	0.422 JQ
ORGANOCHLORINE PESTICIDES AND PCBs - SW9846/SW3559 (mg/kg)							
4,4'-DDD	0.119		0.00167 JQ	<0.00407	<0.00427	<0.00408	<0.00402
4,4'-DDE	0.0841		<0.00161	0.00128 JQ	<0.00171	0.000749 JQ	0.00104 JQ
AR1254	0.05		<0.0405	<0.0407	<0.0427	<0.0408	<0.0402
Chlordane	0.2		<0.0202	0.0127 JQ	<0.0214	<0.0204	<0.0201
Dieldrin	0.00179		<0.000806	<0.000814	<0.000854	<0.000816	<0.000804
Methoxychlor	4.00		<0.0202	<0.0204	<0.0214	<0.0204	<0.0201
CHLORINATED HERBICIDES - SW2150/METHOD (mg/kg)							
2,4,5-TP (Silvex)	5.00		<0.00488	<0.00492	<0.00508	<0.00490	<0.00478
M/CP	NA		<0.66	<0.69	<0.81	<0.68	<0.58
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9846/NONE (mg/kg)							
Acetone	1020		<0.0122 J	0.0403	<0.0124 J	<0.0123	<0.0120
Carbon disulfide	23.4		<0.00610	<0.00604	<0.00621	<0.00616	<0.00601
Methylene chloride	0.5		<0.00610	<0.00604	<0.00621	<0.00616	<0.00601
Toluene	100		0.00631	0.00244 JQ	0.0125 JQ	0.00376 JQ	0.00304 JQ

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Greene Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)							
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82705WJ559 (mg/kg)							
	Sample ID :	FDUP-06	OT3912SA	OT3913SA	OT3914SA	OT3915SA	
	Sample Date :	23-OCT-95	24-OCT-95	23-OCT-95	24-OCT-95	24-OCT-95	
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
	Notes : Duplicate of OT3911SA						
MSC							
	NA	0.159 IQ	12.2 IQ	<0.402	<0.407	<0.395	
	613	0.0343 IQ	<20.4	<0.402	<0.407	<0.395	
	3070	<0.406	<20.4	<0.402	<0.407	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	1020	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	409	0.0430 IQ	<20.4	<0.402	<0.407 J	<0.395	
	409	0.0723 IQ	2.53 IQ	<0.402	<0.407 J	<0.395	
	NA	<0.406	<20.4	<0.402	<0.407 J	<0.395	
	409	0.0238 IQ	3.77 IQ	<0.402	<0.407	<0.395	
	NA	0.259 IQ	5.00 IQ	<0.402	<0.407	<0.395	
	310	0.0731 IQ	<20.4	<0.402	<0.407 J	<0.395	
	2.04	<0.406	<20.4	<0.402	<0.407	<0.395	
		0.6645	23	ND	ND	ND	

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

ND = Not Detected

PAH = Polynuclear Aromatic Hydrocarbon

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Data rejected based upon QC data, do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

TABLE 3-1

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID: Sample Date: Depth: Notes:	OT3916SA 24-OCT-95 0.0' - 2.0'	OT3917SA 23-OCT-95 0.0' - 2.0'	OT3918SA 23-OCT-95 0.0' - 2.0'	OT3919SA 24-OCT-95 0.0' - 2.0'	OT3920SA 24-OCT-95 0.0' - 2.0'	OT3921SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)								
623-9045 pH units Soil			7.83	7.67	7.78	7.60	7.50	7.52
PERCENT SOLID - D2216/NONE (percent)								
623-D2216 Moisture			13.0	18.0	14.0	13.0	16.0	12.0
METALS, TOTAL BY ICP/ASW/6910/SW3468 (mg/kg)								
Aluminum	NA		3890	7810	6730	3540	4530	4810
Antimony	0.6		3.06 JQ	<2.9	<21.4	<19.6	<21.7 JL	2.24 JQ
Barium	200		120	130	141	141	112 JH	82.9
Beryllium	NA		<2.48	0.458	0.428	<2.35	<2.61	<2.49
Calcium	NA		197000	111000	139000	234000	165000	157000
Chromium	10		13.2 JQ	7.06	6.16	7.04 JQ	7.82 JH	<41.4
Cobalt	NA		2.48 JQ	3.94 JQ	2.48 JQ	1.09 JQ	2.69 JQ	1.74 JQ
Copper	NA		9.92 JQ	9.35	8.21	21.9	3.48 JH	8.29 JQ
Iron	NA		6240	7730	6570	4920	5240	5280
Magnesium	NA		2080	2160	2140	1670	1770	1770
Manganese	NA		321	313	313	310	328	273
Molybdenum	NA		<4.14	2.02	2.31 JQ	1.25 JQ	<4.34	1.41 JQ
Nickel	10		222	6.60	6.58	126	233	134
Potassium	NA		1120	1840	1740	738	1170	984
Sodium	NA		107 JB	550	383	113 JB	121 JB	92.4 JB
Vanadium	NA		8.52	11.6	7.18	7.12	9.99	11.3
Zinc	NA		93.0	25.3	26.6	52.7	95.2 J	71.2
ARSENIC, TOTAL BY GF/ASW/7644 (mg/kg)								
Arsenic	3.27		1.49	1.40	2.13	1.33	1.39	14.2
LEAD, TOTAL BY GF/ASW/7431 (mg/kg)								
Lead	1.5		20.3 JH	7.96	14.9	11.3	46.7	14.6
SELENIUM, TOTAL BY GF/ASW/7740 METHOD (mg/kg)								
Selenium	5.0		<0.396	<0.452	<0.430	0.125 JL	<0.410 JL	0.085 JL
ORGANOCHLORINE PESTICIDES AND PCBs - SW8060/SW3554 (mg/kg)								
4,4'-DDD	0.119		<0.00379	<0.00415	<0.00386	<0.00380	0.0124	<0.00376
4,4'-DDE	0.0841		0.0116	<0.00166	0.00165	<0.00152	0.0430	0.000653 JQ
4,4'-DDT	0.0841		<0.00379	<0.00415	<0.00386	<0.00380	0.0134	<0.00376
AR1254	0.05		0.181	<0.0415	<0.0386	<0.0380	<0.0394	<0.0376
Chlordane	0.2		<0.0190 R	<0.0208	<0.0193	0.00982 JQ	0.110	0.0384
Dieldrin	0.00179		<0.000758	<0.000830	<0.000772	<0.000760	<0.000788	<0.000752
Heptachlor epoxide	0.020		<0.00190	<0.00208	<0.00193	<0.00190	0.00175 JQ	<0.00188
Methoxychlor	4.00		<0.0190	<0.0208	<0.0193	<0.0190	<0.0197	<0.0188
CHLORINATED HERBICIDES - SW1510/METHOD (mg/kg)								
2,4,5-TP (Sbur)	5		<0.00460	0.00510	<0.00464	<0.00460	<0.00472	<0.00450
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)								
2-Butanone (MEK)	511		<0.0126	0.0266 J	<0.0121 J	<0.0121	0.0193	<0.0122
Acetone	1020		<0.0126	0.107 J	<0.0121 J	<0.0121	0.0771	<0.0122
Methylene chloride	0.5		<0.00630	<0.00607	<0.00603	0.00289 JQ	<0.00600	0.0271
Tetrachloroethene	0.5		<0.00630	<0.00607	0.000440 JQ	<0.00603	<0.00600	<0.00610

TABLE 3-3

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID		Sample Date		Depth		Notes		OT3916SA		OT3917SA		OT3918SA		OT3919SA		OT3920SA		OT3921SA	
		24-OCT-95		23-OCT-95		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'	
Toluene	100	0.00382	IQ	0.00362	IQ	0.00469	IQ	0.00136	IQ	0.00344	IQ	0.000610	IQ	0.000610	IQ	0.000610	IQ	0.000610	IQ	0.000610	IQ
Xylenes (total)	1000	<0.00630	IQ	0.00296	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ	<0.00603	IQ
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - 3517-3209-31 (3-2b)																					
2-Methylthiophene	NA	<0.383		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Benz(a)anthracene	NA	<0.383		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Benz(a)pyrene	NA	0.0274	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Benz(b)fluoranthene	NA	0.0697	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Butyl benzyl phthalate	NA	2.60		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Chrysene	NA	0.0490	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Di-n-butylphthalate	1020	0.0282	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Dimethylphthalate	NA	6.13		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Fluoranthene	409	0.0598	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Fluorene	409	<0.383		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Naphthalene	409	<0.383		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Phenanthrene	NA	<0.383		<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Pyrene	310	0.0600	IQ	<0.404		<0.382		<0.382		<0.382		<0.404		<0.382		<0.382		<0.382		<0.382	
Is(2-Ethylhexyl)phthalate	2.04	0.0170	IQ	<0.404		0.494		ND		ND		<0.404		ND		ND		0.5105		0.0932	
Total PAHs		0.2659		ND		ND		ND		ND		ND		ND		ND		0.5105		0.0932	

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

I = Estimated quantitation based upon QC data

JB = Estimated quantitation, possibly biased high or a false positive based upon blank data

JH = Estimated quantitation, possibly biased high based upon QC data

JL = Estimated quantitation, possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation, detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data, do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals).

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID: Sample Date : Depth : Notes :	OT3922SA 24-OCT-95 0.0' - 2.0'	OT3923SA 24-OCT-95 0.0' - 2.0'	OT3924SA 24-OCT-95 0.0' - 2.0'	OT3925SA 24-OCT-95 0.0' - 2.0'	FDUP08 24-OCT-95 0.0' - 2.0'
Duplicate of OT3925SA							
SOIL pH - SW9945/NONE (none)							
623-9045 pH units Soil	-		7.54	7.56	7.61	7.74	7.82
PERCENT SOLID - D2216/NONE (percent)							
623-D2216 Moisture	-		18.0	22.0	17.0	17.0	19.0
METALS, TOTAL BY ICP/MSW601SWJ050 (mg/kg)							
Aluminum	NA	10800	3.17 JQ	9060	5530	7520	7680
Antimony	0.6			<21.9	2.68 JQ	<22.3	<21.7
Barium	200	133		133	100	125	126
Beryllium	0.4			<2.87	<2.51	0.535	0.521
Calcium	NA	119000		120000	193000	122000	128000
Chromium	10		14.6 JQ	<47.8	13.4 JQ	7.40	9.21
Cobalt	NA		2.60 JQ	1.24 JQ	1.59 JQ	2.59 JQ	2.43 JQ
Copper	NA		10.6 JQ	16.3 JQ	21.8 JQ	9.81	9.04
Iron	NA	7920		8570	4620	6910	6850
Magnesium	NA	2630		2210	2480	2140	2110
Manganese	NA	222		163	372	220	190
Molybdenum	NA		<4.06	1.53 JQ	<4.18	<4.46	<4.34
Nickel	10		114	155	135	7.76	6.78
Potassium	NA	1970		1860	1130	1660	1540
Sodium	NA		216 JB	81.8 JB	147 JB	132 JB	141 JB
Vanadium	NA	9.84		13.8	8.79	11.0	11.0
Zinc	NA	48.9		58.8	105	32.4 J	21.2 J
ARSENIC, TOTAL BY GFAA/MSW 7649 (mg/kg)							
Arsenic	3.27		3.08	0.566	1.27	0.814 JH	0.844
LEAD, TOTAL BY GFAA/MSW 7451 (mg/kg)							
Lead	1.5		9.11	33.1	14.0	8.67	9.09
SELENIUM, TOTAL BY GFAA/MSW 7744/METHOD (mg/kg)							
Selenium	5.0		<0.430	<0.493 JL	0.104 JL	<0.460	<0.432
ORGANOCHLORINE PESTICIDES AND PCBs - SW8809SWJ559 (mg/kg)							
4,4'-DDD	0.119		<0.00400	<0.00426	<0.00400	<0.00397	<0.00408
4,4'-DDE	0.0841		<0.00160	<0.00170	<0.00160	<0.00159	<0.00163
4,4'-DDT	0.0841		<0.00400	<0.00426	<0.00400	<0.00397	<0.00408
AR1254	0.05		<0.0400	<0.0426	<0.0400	<0.0397	<0.0408
Chlordane	0.2		<0.0200	<0.0213	0.0104 JQ	<0.0198	<0.0204
Dieldrin	0.00179		<0.000800	<0.00852	<0.00800	<0.00794	<0.00816
Heptachlor epoxide	0.020		<0.00200	<0.00213	<0.00200	<0.00198	<0.00204
Methoxychlor	4.00		<0.0200	<0.0213	<0.0200	<0.0198	<0.0204
CHLORINATED HERBICIDES - SW8159/METHOD (mg/kg)							
2,4,5-TP (SVex)	5		<0.00488	<0.00508	<0.00480	<0.00480	<0.00494
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)							
2-Butanone (MEX)	311		<0.0121	<0.0127	<0.0125	<0.0120	<0.0119
Acetone	1020		<0.0121	<0.0127	<0.0125	<0.0120	<0.0119
Methylene chloride	0.5		<0.00606	0.00312 JQ	0.00319 JQ	<0.00600	<0.00594
Tetrachloroethene	0.5		<0.00606	<0.00635	<0.00625	<0.00600	<0.00594

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carlisle Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)										
Sample ID :	OT3923SA	OT3923SA	OT3923SA	OT3923SA	OT3923SA	OT3923SA	OT3923SA	OT3923SA	OT3923SA	FDUP08
Sample Date :	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95
Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
Notes :										Duplicate of OT3923SA
MISC										
	100	0.00770	<0.00635	0.000692	IQ	0.0336	IQ	<0.00594	J	<0.00594
	1000	<0.00606	<0.00635	<0.00625		<0.00600		<0.00594		
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW821703W31559 (mg/kg)										
2-Methylnaphthalene	NA	<0.400	<0.423	<0.400		<0.399		<0.410	J	<0.410
Benz(a)anthracene	NA	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
Benzo(a)pyrene	NA	<0.400	<0.423	0.0296	J	<0.399	J	<0.410	J	<0.410
Benzo(b)fluoranthene	NA	<0.400	<0.423	0.0860	J	<0.399	J	<0.410	J	<0.410
Butyl benzyl phthalate	NA	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
Chrysene	NA	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
Di-n-butylphthalate	1020	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
Dimethylphthalate	NA	<0.400	<0.423	<0.400		<0.399		<0.410		<0.410
Fluoranthene	409	<0.400	<0.423	<0.400		0.0127	IQ	<0.410		<0.410
Fluorene	409	<0.400	<0.423	<0.400		<0.399		<0.410		<0.410
Naphthalene	409	<0.400	<0.423	<0.400		<0.399		<0.410		<0.410
Phenanthrene	NA	<0.400	<0.423	<0.400		<0.399		<0.410		<0.410
Pyrene	310	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
bis(2-Ethylhexyl)phthalate	2.04	<0.400	<0.423	<0.400		<0.399	J	<0.410	J	<0.410
Total PAHs		ND	ND	0.1156		0.0127		<0.410	J	ND

Data Qualification Flags/Notes:

MSC = Medium-Specific Concentration

NA = Not available

I = Estimated quantitation based upon QC data

JB = Estimated quantitation; possibly biased high or a false positive based upon blank data

JH = Estimated quantitation; possibly biased high based upon QC data

JL = Estimated quantitation; possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation; detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data; do not use

☐ Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals)

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carnwell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	MSC	Sample ID Sample Date Depth Notes	OT3927SA 24-OCT-95 0.0' - 2.0'	OT3928SA 24-OCT-95 0.0' - 2.0'	FDUP07 24-OCT-95 0.0' - 2.0'	OT3929SA 24-OCT-95 0.0' - 2.0'	OT3930SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)							
623-9045 pH units Soil			7.65	7.54	7.54	7.62	7.51
PERCENT SOLID - D2216/NONE (percent)							
623-D2216 Moisture			18.0	19.0	12.0	18.0	19.0
METALS, TOTAL BY ICP/ASW/6010SW/1658 (mg/kg)							
Aluminum	NA		6970	7910	6420	10700	9150
Antimony	0.6		2.71 JQ	<21.2	1.81 JQ	1.92 JQ	2.04 JL
Barium	200		128	135	106	123	100
Beryllium	0.4		<2.71	0.592	<2.47	0.610	0.742
Calcium	NA		121000 J	71500 J	127000	77100	23000
Chromium	10		<45.2	7.19	26.2 JQ	10.3	9.56
Cobalt	NA		2.71 JQ	3.47 JQ	2.64 JQ	3.75 JQ	4.08 JQ
Copper	NA		9.93 JQ	13.0	10.7 JQ	9.84	9.47
Iron	NA		5930	6790	6490 J	7590	7480
Magnesium	NA		2020	2260	1870	3140	2380
Manganese	NA		275	279	359	322	397
Molybdenum	NA		<4.52	<4.23	2.06 JQ	2.26 JQ	<4.64 JL
Nickel	10		65.8	7.61	59.3 J	8.88	8.44
Potassium	NA		1580	2010	1560	2290	2000
Sodium	NA		87.5 JB	65.6 JB	89.5 JB	126 JB	216 JB
Vanadium	NA		10.1	10.5	10.5	8.45	11.0
Zinc	NA		34.6	44.3	60.0 J	18.4	18.6
ARSENIC, TOTAL BY GFAA/ASW 7968 (mg/kg)	3.27		1.08 JH	1.73	2.94 J	2.95	2.56 JL
LEAD, TOTAL BY GFAA/ASW 7481 (mg/kg)	1.5		8.57	22.9	86.0 J	8.02	10.0 J
SELENIUM, TOTAL BY GFAA/ASW 7740/METHOD (mg/kg)	5.0		0.458 JQ	<0.412	0.410 JQ	<0.415	<0.468 JL
ORGANOCHLORINE PESTICIDES AND PCBS - SW8060/ASW/5559 (mg/kg)							
4,4'-DDD	0.119		0.000886 JQ	<0.00408	<0.00374 J	<0.00402	<0.00405
4,4'-DDE	0.0841		<0.00162	<0.00163	0.000986 JQ	<0.00161	<0.00162
4,4'-DDT	0.0841		<0.00405	<0.00408	<0.00374 J	<0.00402	<0.00405
AR1254	0.05		<0.0405	<0.0408	<0.0397	<0.0402	<0.0405
Chlordane	0.2		<0.0202	<0.0204	0.0775 J	<0.0201	0.0231
Dieldrin	0.00179		0.00331	<0.000816	<0.000794	<0.000804	<0.000810
Heptachlor epoxide	0.020		<0.00202	<0.00204	<0.00187	<0.00201	<0.00202
Methoxychlor	4.00		<0.0202	<0.0204	0.0129 JB	<0.0201	<0.0202
CHLORINATED HERBICIDES - SW8159/METHOD (mg/kg)							
2,4,5-TP (Shex)	5		<0.00486	<0.00492	<0.00454	<0.00488	<0.00490
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)							
2-Butanone (MEK)	511		<0.0118	<0.0124	<0.0119	<0.0126	<0.0124
Acetone	1020		<0.0118	<0.0124	<0.0122	<0.0126	<0.0124
Methylene chloride	0.5		<0.00592	<0.00620	<0.00608	<0.00628	<0.00621
Tetrachloroethene	0.5		<0.00592	<0.00620	<0.00608	<0.00628	0.00558 JQ

TABLE 3-2

POSITIVE ANALYTICAL RESULTS

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD (UNITS)	Sample ID Sample Date Depth Notes	OT39268A 24-OCT-95 0.0' - 2.0'	OT39278A 24-OCT-95 0.0' - 2.0'	OT39288A 24-OCT-95 0.0' - 2.0'	FDUP07 24-OCT-95 0.0' - 2.0'	OT39298A 24-OCT-95 0.0' - 2.0'	OT39308A 24-OCT-95 0.0' - 2.0'
MSC					Duplicate of OT39288A		
Toluene	100	<0.00592	<0.00620	0.00668	0.00159 JQ	<0.00628	0.00230 JQ
Xylenes (total)	1000	<0.00592	<0.00620	<0.00596	<0.00608	<0.00628	<0.00621
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW82550 (mg/kg)							
2-Methylnaphthalene	NA	<0.405	<0.407	<0.397	<0.373	<0.403	<0.406
Benz(a)anthracene	NA	<0.405	<0.407	0.0445 JQ	<0.373 J	<0.403	<0.406
Benz(a)pyrene	NA	<0.405	<0.407	0.0433 J	<0.373 J	<0.403	<0.406
Benz(b)fluoranthene	NA	<0.405	0.0375 JQ	0.0659 J	<0.373 J	0.0431 JQ	<0.406
Butyl benzyl phthalate	NA	<0.405	<0.407	<0.397	<0.373 J	<0.403	0.156 JQ
Chrysene	NA	<0.405	0.0243 JQ	0.0651 JQ	<0.373 J	0.0345 JQ	<0.406
Di-n-butylphthalate	1020	<0.405	<0.407	<0.397	0.0257 JQ	<0.403	<0.406
Dimethylphthalate	NA	<0.405	<0.407	<0.397	<0.373	<0.403	<0.406
Fluoranthene	409	<0.405	0.0167 JQ	0.0873 JQ	0.0151 JQ	<0.403	0.0137 JQ
Fluorene	409	<0.405	<0.407	<0.397	<0.373	<0.403	<0.406
Naphthalene	409	<0.405	<0.407	<0.397	<0.373	<0.403	<0.406
Phenanthrene	NA	<0.405	<0.407	<0.397	<0.373	<0.403	0.0255 JQ
Pyrene	310	0.0474 J	0.0240 JQ	0.0368 JQ	0.0270 J	<0.403	<0.406
but(2-Ethylhexyl)phthalate	2.04	<0.405 J	<0.407	<0.397	<0.373 J	<0.403	0.309 JQ
Total PAHs		0.0474	0.1025	0.439	0.0421	0.0776	0.0402

Data Qualification Flags/Notes:

MSC - Medium-Specific Concentration

NA = Not available

J = Estimated quantitation based upon QC data

JB = Estimated quantitation: possibly biased high or a false positive based upon blank data

JH = Estimated quantitation: possibly biased high based upon QC data

JL = Estimated quantitation: possibly biased low or a false negative based upon QC data

JQ = Estimated quantitation: detected below the Practical Quantitation Limit

R = Datum rejected based upon QC data: do not use

Results in boxes exceed MSC value (organics) and background concentration and MSC value (metals).

PREPARED/DATE: John Pascoe / 3-22-96
CHECKED/DATE: Sue D. Max / 3-22-96

appeared to contain high concentrations of aluminum and vanadium, indicating that the background locations may not be representative of background conditions.

A high degree of variability was observed between the concentrations reported for several metals in the two site-specific background samples. Based on this observation, the background concentrations used for data comparison in the following section may not be representative of basewide background concentrations.

3.2.2 Data Summary

The analytical results for the Grounds Maintenance Yard are discussed by chemical class below.

Volatile Organic Compounds - Acetone, 2-butanone (MEK), carbon disulfide, methylene chloride, tetrachloroethene, toluene, and xylenes were detected in soil samples collected at this site. With the exception of toluene, volatile constituents were not detected in the background samples. Background sample OT3901SA contained 0.00503 mg/kg toluene which was less than the PQL. Toluene was detected in 21 of 28 samples analyzed as depicted in Figure 3-11, however 14 results were reported at concentrations less than the PQL. The maximum concentration of toluene detected was 0.0336 mg/kg at OT3925SA. Other volatile constituents detected include the following:

- Acetone was detected at three locations, OT3912SA, OT3917SA, and OT3920SA with a maximum concentration of 0.107 mg/kg at OT3917SA. These locations are adjacent to the mower storage shed and concrete containment pad.
- 2-Butanone was detected at two locations, OT3917SA and OT3920SA with a maximum concentration of 0.0266 mg/kg at OT3917SA. These locations are adjacent to the mower storage shed and concrete containment pad.
- Carbon disulfide was detected at one location OT3908SA, on the east edge of the site, at a concentration of 0.00061 mg/kg.

- Methylene chloride was detected at five locations with a maximum concentration of 0.0271 mg/kg at OT3921SA, located in the central portion of the site.
- Tetrachloroethene was detected at two locations, OT3918SA and OT3930SA. The maximum sample concentration reported was 0.00358 mg/kg at OT3930SA, located adjacent to the office on the southwest edge of the site.
- Xylenes were detected at one location, OT3917SA, at a concentration of 0.00296 mg/kg, which was below the PQL. This location is adjacent to the mower storage shed.

Semi-Volatile Organic Compounds - Semi-volatile constituents detected in soil samples include 2-methylnaphthalene, acenaphthene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, butyl benzyl phthalate, chrysene, di-n-butylphthalate, dimethylphthalate, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and bis(2-ethylhexyl)phthalate. Semi-volatiles were not detected in the background surface soil samples with the exception of di-n-butylphthalate detected at 0.0276 mg/kg, which was below the PQL, in sample OT3901SA.

PAHs were detected at 15 of 28 sample locations as depicted in Figure 3-12. The highest concentrations of PAHs encountered were collected from samples collected adjacent to the concrete containment pad and along the east edge of the site. The maximum concentration of total PAHs reported was 41.01 mg/kg, at OT3905SA.

Phthalates were detected in several soil samples, however di-n-butylphthalate was detected only at concentrations below the PQL. Butyl benzyl phthalate was detected above the PQL in one sample, OT3916SA, at a concentration of 2.60 mg/kg. Bis(2-ethylhexyl)phthalate was detected above the PQL at two locations, OT3905SA and OT3918SA, at concentrations of 2.35 mg/kg and 0.494 mg/kg, respectively. OT3905SA is located on the east edge of the site.

Pesticide/PCBs - Pesticides and PCBs detected in soil samples include 4,4'-DDT, 4,4'-DDD, 4,4'-DDE, Aroclor 1254, chlordane, dieldrin, heptachlor epoxide, and methoxychlor. Pesticides and PCBs were not detected in either of the background soil samples. Pesticide/PCB constituents are depicted in Figure 3-13 and are discussed below:

- 4,4'-DDT was detected at two locations, OT3920SA and OT3928SA, at 0.0134 mg/kg and 0.176 mg/kg, respectively. These locations are near the concrete containment pad and the equipment bay.
- 4,4'-DDD was detected at four locations, OT3911SA, OT3920SA, OT3926SA, and OT3928SA. The maximum sample concentration reported was 0.0342 mg/kg at OT3928SA.
- 4,4'-DDE was detected at nine locations, with a maximum sample concentration of 0.143 mg/kg at OT3928SA.
- Aroclor 1254 was detected at two locations, OT3909SA and OT3916SA, at 0.161 mg/kg and 0.181 mg/kg, respectively. These locations are in the fenced electric substation.
- Chlordane was detected at 8 of 28 sample locations. The maximum sample concentration reported was 0.110 mg/kg at OT 3920SA, near the concrete containment pad.
- Dieldrin was detected at three locations, OT3904SA, OT3910SA, and OT3926SA. The maximum sample concentration reported was 0.00331 mg/kg at OT3926SA, near the west edge of the site.
- Heptachlor epoxide was detected at one location, OT3920SA, at a concentration of 0.00175 mg/kg, below the PQL.
- Methoxychlor was detected at one location, OT3928SA, at a concentration of 0.0129 mg/kg, however this result was qualified as an estimated value due to blank contamination.

Chlorinated Herbicides - Herbicides detected in soil samples include 2,4,5-TP (Silvex) and MCP. Herbicides were not detected in either of the background soil samples. Silvex was detected in two samples, OT3911SA and OT3917SA, at 0.00551 mg/kg and 0.00510 mg/kg,

respectively. MCPP was detected in sample OT3905SA at 4.05 mg/kg. Figure 3-14 depicts the locations where herbicides were detected.

Metals - Metals detected in soil samples include aluminum, antimony, arsenic, barium, beryllium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, selenium, sodium, vanadium, and zinc. All of the metal constituents reported were detected at one or both background locations with the exception of antimony and selenium. Aluminum, arsenic, barium, calcium, iron, lead, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc were detected at concentrations above the PQL in both samples. The following metals were detected at concentrations greater than the maximum background concentration:

- Aluminum results exceeded the maximum background concentration of 9,440 mg/kg at 2 of 28 sample locations. The maximum sample concentration reported was 10,800 mg/kg at OT3922SA.
- Antimony was detected at 10 of 28 sample locations as depicted in Figure 3-15. The maximum sample concentration reported was 3.17 mg/kg at OT3922A. Antimony was not detected in either background sample.
- Arsenic results exceeded the maximum background concentration of 2.23 mg/kg at 6 of 28 sample locations as depicted in Figure 3-16. The maximum sample concentration reported was 169 mg/kg at OT3907SA on the east edge of the site. Additional locations exceeding the background concentration are distributed across the site.
- Barium results exceeded the maximum background concentration of 122 mg/kg at 20 of 28 sample locations. The maximum sample concentration reported was 183 mg/kg at OT3911SA.
- Beryllium results exceeded the maximum background concentration of 0.634 mg/kg at 2 of 28 sample locations. Detections of beryllium were reported at 8 of 28 locations, as depicted in Figure 3-17. The maximum sample concentration reported was 1.81 mg/kg at OT3911SA. Seven of eight detections were encountered on the south side of the site.

- Calcium results exceeded the maximum background concentration of 106,000 mg/kg at 25 of 28 sample locations. The maximum sample concentration reported was 296,000 mg/kg at OT3906SA. Additional locations exceeding the background concentration are distributed across the site.
- Chromium results exceeded the maximum background concentration of 9.28 mg/kg at 12 of 28 sample locations as depicted in Figure 3-18. The maximum sample concentration reported was 32.7 mg/kg at OT3905SA located on the east edge of the site.
- Cobalt results exceeded the maximum background concentration of 3.57 mg/kg at 3 of 28 sample locations, however all of the results were less than the PQL.
- Copper results exceeded the maximum background concentration of 9.04 mg/kg at 13 of 28 sample locations. The maximum sample concentration reported was 24.8 mg/kg at OT3906SA located on the east edge of the site. Many of the concentrations exceeding the background were reported below the PQL.
- No iron results exceeded the maximum background concentration of 10,800 mg/kg reported at OT3901SA. However, 6 of 28 sample locations exceeded the secondary background concentration of 7,090 mg/kg reported at OT3902SA. The highest sample concentration reported was 9,630 mg/kg at OT3928SA.
- Lead results exceeded the maximum background concentration of 12.4 mg/kg at 13 of 28 sample locations as depicted in Figure 3-19. The maximum sample concentration reported was 86.0 mg/kg at OT3928SA located on the west edge of the site between the trailers. Additional results exceeding background were identified at OT3920SA near the concrete containment pad, at OT3905SA and OT3907SA on the east edge of the site, and at other locations distributed across the site.
- Magnesium results exceeded the maximum background concentration of 2,370 mg/kg at 5 of 28 sample locations. The maximum concentration reported was 3,140 mg/kg at OT3929SA located near the office.
- Manganese results exceeded the maximum background concentration of 334 mg/kg at 10 of 28 sample locations. The maximum concentration reported was 493 mg/kg at OT3911SA located on the south side of the site.

- Molybdenum results exceeded the maximum background concentration of 1.59 mg/kg at 7 of 28 sample locations, however many of the results were less than the PQL. The maximum concentration reported was 2.31 mg/kg at OT3918SA, located on the south side of the site.
- Nickel results exceeded the maximum background concentration of 114 mg/kg reported at OT3902SA, at 19 of 28 sample locations. Nickel exceeded the secondary background concentration of 8.72 mg/kg at 22 of 28 sample locations, as depicted in Figure 3-20. The maximum concentration reported was 257 mg/kg at OT3911SA, located on the south side of the site. Other locations exceeding background are distributed across the site.
- One potassium result exceeded the maximum background concentration of 2,170 mg/kg reported at OT3901SA. Potassium exceeded the secondary background concentration of 1,480 mg/kg at 12 of 28 locations. The highest reported concentration was 2,290 mg/kg at OT3929SA.
- Selenium was detected at 12 locations, however several results were reported below the PQL. The maximum concentration reported was 0.617 mg/kg at OT3914SA, located in the central portion of the site. Selenium was not detected in either background sample.
- Sodium results exceeded the maximum background concentration of 70.6 mg/kg at 27 of 28 sample locations, however 17 samples were qualified as estimated due to blank contamination. The maximum concentration reported was 550 mg/kg at OT3917SA, located on the south side of the site.
- None of the vanadium results exceeded the maximum background concentration of 17.4 mg/kg at OT3902SA, located on the north side of the site.
- Zinc results exceeded the maximum background concentration of 44.2 mg/kg at 21 of 28 sample locations. The maximum concentration reported was 122 mg/kg at OT3911SA, located on the south side of the site.

4.0 REGULATORY COMPARISON

The positive analytical results from the site investigation were compared to the appropriate Texas Natural Resource Conservation Commission (TNRCC) regulatory standards. The selection of regulatory standards was based on LAW's understanding of current land use and probable future land use at the facility.

4.1 REGULATORY STANDARDS

The TNRCC published the final Risk Reduction Standards in the Texas Register and the regulation was made effective June 29, 1993, (TNRCC, 1993). The standards were written for the protection of human health and the environment from exposure to contaminant releases. Under the Standards, closure of a contaminated area may be attained by applying Risk Reduction Standard Number 1, 2, or 3. Risk Reduction Standard Number 1 involves closure or remediation to background, or to the practical quantitation limit (PQL), if the PQL is greater than background. Standard Number 2 involves closure or remediation to health-based cleanup levels or medium specific concentrations (MSCs). The TNRCC has published MSCs for soil and ground water, for both industrial and residential land use. If industrial soil MSCs are used, the responsible party must register specific information about the site in the registry of county deeds, and future owners of the facility are required to undertake responsibility for post-closure care. Risk Reduction Standard Number 3 includes a baseline risk assessment for the purpose of assessing the potential risk to human health and the environment under existing site-specific conditions.

The scope of this site investigation was developed to determine the presence of site contaminants that may potentially impact human health through direct contact with surface soil, or through contamination of ground water or surface water. The land use at the two sites investigated is currently, and is expected to continue to be, industrial. Therefore, the industrial MSCs for soil were used for both the Soil/Air and Ingestion Standard (SAI-Ind) and the Soil-to-Ground Water Cross-Media Protection Concentration (GWP-Ind). The lower of the two criteria for any

380 . 322

detected constituent was used to determine whether a reported concentration exceeded the MSC value under Standard Number 2.

4.2 COMPARISON OF RESULTS TO REGULATORY STANDARDS

Background data were obtained for each of the two sites investigated in order to perform a comparison of metals constituents detected at the sites to naturally occurring concentrations. For metals occurring at concentrations exceeding background levels, results were also compared to MSC values (Tables 3-1 and 3-2). Organic constituents were compared directly to MSC values. When sample duplicate results were reported, the highest concentration was used for comparison purposes. Any result qualified as estimated due to blank contamination (JB) was not included in the sample data used for comparison.

4.2.1 Aerospace Museum Site

Eight metals were reported at concentrations exceeding both the site-specific background concentrations, as discussed in Section 3.1, and MSC criteria. A site map depicting the concentrations of these metals is presented in Figure 4-1.

- Antimony was reported in one background sample at a concentration greater than the MSC value of 0.6 mg/kg. Ten samples were reported with antimony concentrations greater than background and the MSC criteria.
- Arsenic was reported at concentrations greater than the MSC value of 3.27 mg/kg in three samples.
- Barium was reported at a concentration greater than the MSC value of 200 mg/kg in one sample.
- Beryllium was reported at concentrations greater than the MSC value of 0.4 mg/kg in 25 samples.
- Cadmium was reported at concentrations greater than the MSC value of 0.5 mg/kg in two samples.

- Chromium was reported in one background sample at 10.8 mg/kg, greater than the MSC value of 10.0 mg/kg. Eighteen samples were reported with chromium concentrations greater than the background sample and MSC value.
- Lead was reported in five samples at concentrations exceeding the secondary background sample and the MSC value of 1.5 mg/kg.
- Nickel was reported in thirty-two samples at concentrations exceeding the secondary background sample and the MSC value of 10.0 mg/kg.

All volatile and semi-volatile organic constituents detected were compared directly to the appropriate MSC values. All sample results reported for organic constituents were less than the MSC values.

4.2.2 Grounds Maintenance Yard

Six metals were reported at concentrations exceeding both the site-specific background concentrations, as discussed in Section 3.2, and MSC values. A site map depicting the concentrations of these metals is presented in Figure 4-2.

- Antimony was detected in ten samples at concentrations exceeding the MSC value of 0.6 mg/kg. Background samples were nondetect.
- Arsenic was detected in three samples at concentrations exceeding the MSC value of 3.27 mg/kg.
- Beryllium was reported in eight samples at concentrations exceeding the secondary background sample and the MSC value of 0.4 mg/kg.
- Chromium was reported in nine samples at concentrations exceeding the MSC value of 10.0 mg/kg.
- Lead was reported in thirteen samples at concentrations exceeding the MSC value of 1.5 mg/kg.
- Nickel was reported in twenty-one samples at concentrations exceeding the secondary background sample and the MSC value of 10.0 mg/kg.

All organic constituents detected, including pesticides/PCBs, herbicides, volatile organics, and semi-volatile organics, were compared directly to the appropriate MSC criteria. The sample results reported for all organic constituents were less than the MSC criteria with the following exceptions: one sample contained bis(2-ethylhexyl)phthalate exceeding the MSC criterion of 2.04 mg/kg; one sample contained both 4,4'-DDT and 4,4'-DDE, each exceeding the MSC criterion of 0.0841 mg/kg; one sample contained dieldrin exceeding the MSC criterion of 0.00179 mg/kg; and two samples contained Aroclor 1254 exceeding the MSC criterion of 0.05 mg/kg.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

A summary of findings based on the results of the soil analyses performed during the site investigations are presented in the following sections.

5.1.1 Aerospace Museum Site

Soil samples collected at the Aerospace Museum Site contained metals, volatile organic, and semi-volatile organic constituents. Toluene was detected in samples throughout the site, including background locations. The toluene results may be attributable to widespread ambient contamination or laboratory contamination; however, no contamination was detected in the associated field or laboratory QC blanks. Methylene chloride was detected at only one location at the site. All detections of volatile compounds were less than the MSC criteria.

Polynuclear aromatic hydrocarbon compounds were detected throughout the site, including the background sample collected north of the site. The highest concentrations encountered were in the northern area of the site adjacent to Farmers Branch. The presence of PAH constituents could be the result of surficial spills of petroleum products, oils, or lubricants previously documented at this site. None of the individual PAH constituents exceeded the MSC criteria.

Phthalates were detected at concentrations less than the MSC criteria. The presence of phthalates at low levels may be due to the prevalence of phthalate compounds in the environment, and thus may be unrelated to previous site activities.

Samples collected from four locations exhibited maximum concentrations for multiple metals. Chromium and copper concentrations were highest at location OT3801SA; aluminum, magnesium, and potassium concentrations were highest at location OT3824SA; iron, lead, molybdenum, and sodium concentrations were highest at location OT3840SA; and antimony,

arsenic, nickel, and zinc were highest at location OT3848SA. These four locations are near the site perimeter on the northeast, west, southwest, and southeast boundaries of the site. Locations OT3801SA and OT3840SA are adjacent to Farmers Branch, which flows along the northern and eastern boundary of the site, and eventually empties into the West Fork of the Trinity River.

Of the 22 metal constituents detected at the site, all 22 were reported at concentrations exceeding background levels at one or more locations. Of these, the following eight metals also exceeded MSC criteria: antimony, arsenic, barium, beryllium, cadmium, chromium, lead, and nickel. However, the background data collected during this investigation may not be representative of base-wide background concentrations, as discussed in section 3.0. As a result, the findings for metals detected at the site are inconclusive.

5.1.2 Grounds Maintenance Yard

Soil samples collected at the Grounds Maintenance Yard contained metals, volatile organics, semi-volatile organics, pesticides/PCBs, and chlorinated herbicides. Seven volatile constituents were detected, including acetone, 2-butanone (MEK), carbon disulfide, methylene chloride, tetrachloroethene, toluene, and xylenes. Toluene was detected in samples throughout the site, including the two background locations. The toluene results may be attributable to widespread ambient contamination or laboratory contamination; however, no contamination was detected in the associated field or laboratory QC blanks. Methylene chloride was detected at five locations, acetone was detected at three locations, 2-butanone and tetrachloroethene were detected at two locations, and carbon disulfide and xylenes were detected at one location. The presence of low levels of volatile constituents may be related to solvent usage for the purpose of cleaning the equipment stored at the site. All detections of volatile compounds were less than the MSC criteria.

Polynuclear aromatic hydrocarbon compounds were detected throughout the site. However, the highest concentrations occurred adjacent to the concrete containment pad and directly east (downgradient) of that location. The presence of PAH constituents could be the result of

surficial spills of petroleum products, oils, or lubricants associated with site activities. None of the individual PAH constituents exceeded the MSC criteria.

All phthalates detected were at concentrations less than the MSC criteria except for bis(2-ethylhexyl)phthalate. The highest concentration detected was at a location near the eastern site boundary. The source of this contamination is unknown; however, phthalates are commonly occurring environmental contaminants.

Pesticides were detected at the site in areas where mixing and handling of these substances likely occurred. Location OT3928SA, between the trailers on the west side of the site, exhibited the maximum concentrations of 4,4'-DDT, 4,4'-DDD, 4,4'-DDE, and methoxychlor. Location OT3920SA, adjacent to the concrete containment pad, exhibited the maximum concentration of chlordane at the site. In addition, heptachlor epoxide, 4,4'-DDT, and 4,4'-DDD were also detected adjacent to the pad. PCBs were detected at two locations in a drainage feature downgradient of the electric substation. Arochlor 1254 concentrations were greater than the MSC criteria at these locations. All pesticide concentrations were less than the MCS criteria with the exception of 4,4'-DDT, 4,4'-DDE, and dieldrin.

The chlorinated herbicides Silvex and MCPP were detected at three locations at the site, but at concentrations less than the MSC criteria. The presence of herbicides is consistent with the historic use of the maintenance yard.

Location OT3911SA, downgradient from both the concrete pads and the mower storage area, exhibited the maximum concentrations for five metals: barium, beryllium, manganese, nickel, and zinc. The presence of arsenic and lead at locations OT3928SA and OT3921SA, adjacent to and downgradient of the pesticide storage area, could be related to pesticides also found at these locations.

Of the 20 metal constituents detected at the site, 18 were reported at concentrations that exceeded background levels at one or more locations. Of these, the following six metals also

exceeded MSC criteria: antimony, arsenic, chromium, lead, and nickel. However, the background data collected during this investigation may not be representative of base-wide background concentrations, as discussed in Section 3.0. As a result, the findings for metals detected at the site are inconclusive.

5.2 RECOMMENDATIONS

Based on the results of the investigations performed at the Aerospace Museum Site and Grounds Maintenance Yard, LAW has prepared the following recommendations.

5.2.1 Aerospace Museum Site

- Polynuclear aromatic hydrocarbons detected in the northern area of the site adjacent to Farmers Branch have not been fully delineated. LAW recommends sampling of Farmers Branch sediments to determine whether PAH constituents pose a threat to surface water. Additional soil sampling may also be necessary to define the vertical extent of PAH contamination.
- Metals data from this investigation were inconclusive because the data from the two background samples do not appear to be representative of true background levels when compared to metals concentrations reported from the site. LAW recommends that the results of the planned base-wide background study be used to reevaluate this site for concentrations of metals.

5.2.2 Grounds Maintenance Yard

- Volatile organic compounds, PAH compounds, and bis(2-ethylhexyl)phthalate detected at the site have not been fully delineated. LAW recommends additional soil sampling to fully delineate the horizontal and vertical extent of these constituents.
- Pesticides/PCBs detected at the site have not been fully delineated. LAW recommends additional sampling to determine the horizontal and vertical extent of these constituents. PCBs may pose a risk due to off-site migration via surface drainage features. LAW recommends containment of run-off from the electric substation to reduce off-site migration, and removal of the PCB source and contaminated soils.

- Metals data from this investigation were inconclusive because the data from the two background samples do not appear to be representative of true background levels when compared to metals concentrations reported from the site. LAW recommends a base-wide background study of metals in soil and a reevaluation of this site based on base-wide background concentrations of metals.

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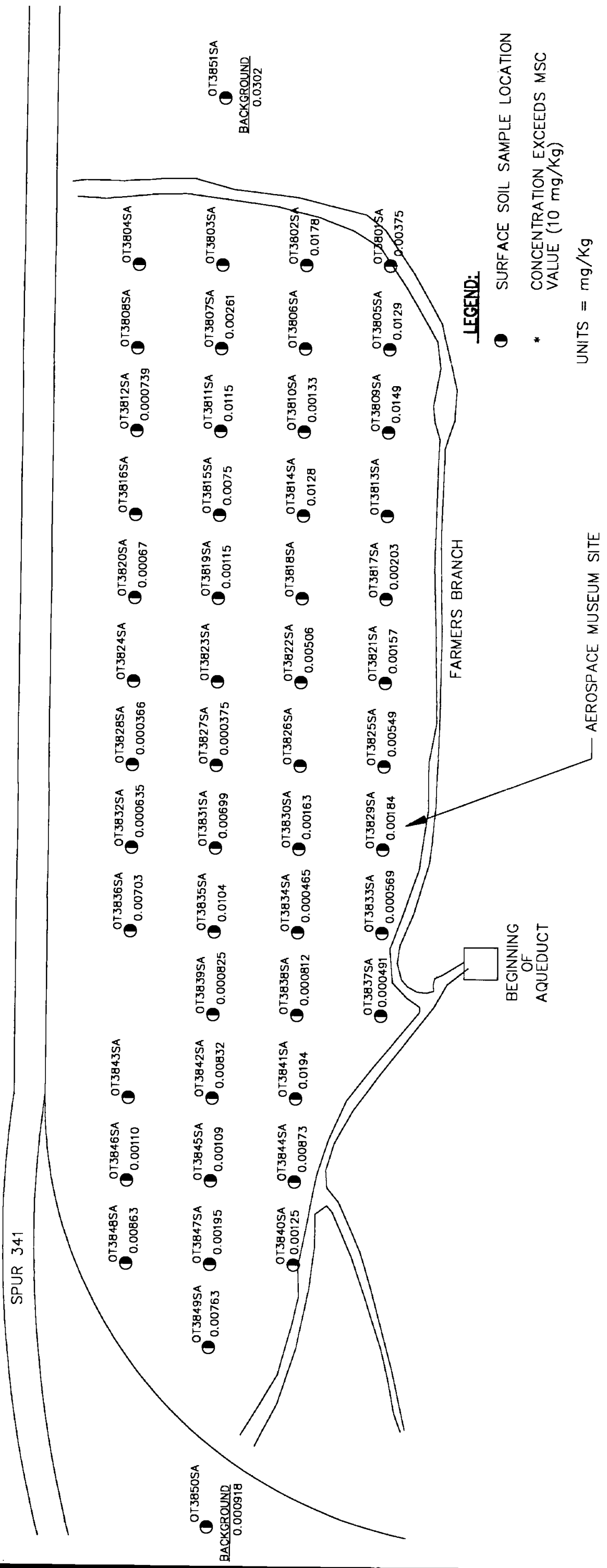
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TAB

Figures



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
TOLUENE CONCENTRATIONS	
AEROSPACE MUSEUM SITE	
PREPARED BY: <i>SDM</i>	FIGURE NUMBER: <i>7/10/96</i>
CHECKED BY: <i>SP</i>	FILE DATE: 20 JAN 96
PROJECT NO. 11-3517-3209	PLOT DATE: 21 FEB 96
	FILE NAME: AM-TOLU.dwg



① SURFACE SOIL SAMPLE LOCATION

UNITS = mg/kg



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

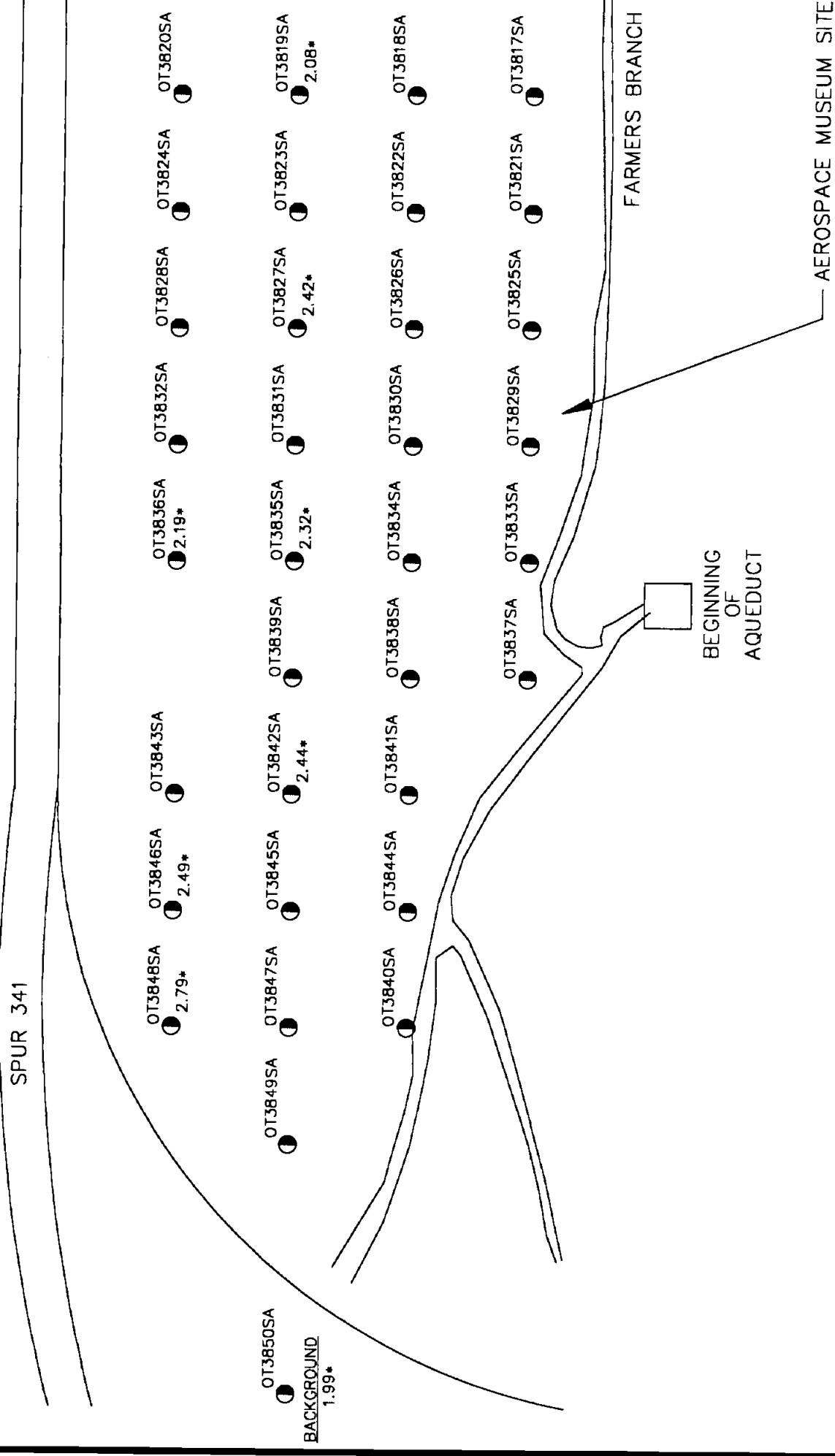
TOTAL PAH CONCENTRATIONS

AEROSPACE MUSEUM SITE

PREPARED BY: <i>SJM</i>	FIGURE NUMBER: <i>7/10/96</i>
CHECKED BY: <i>SJM</i>	

PROJECT NO. 11-3517-3209

AM-PAH.dwg



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- * CONCENTRATION EXCEEDS MSC VALUE (0.6 mg/kg)

0 120 240
SCALE IN FEET

UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT
ANTIMONY CONCENTRATIONS
GREATER THAN BACKGROUND

AEROSPACE MUSEUM SITE

PREPARED BY: SGM 7/1/1

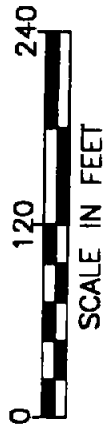
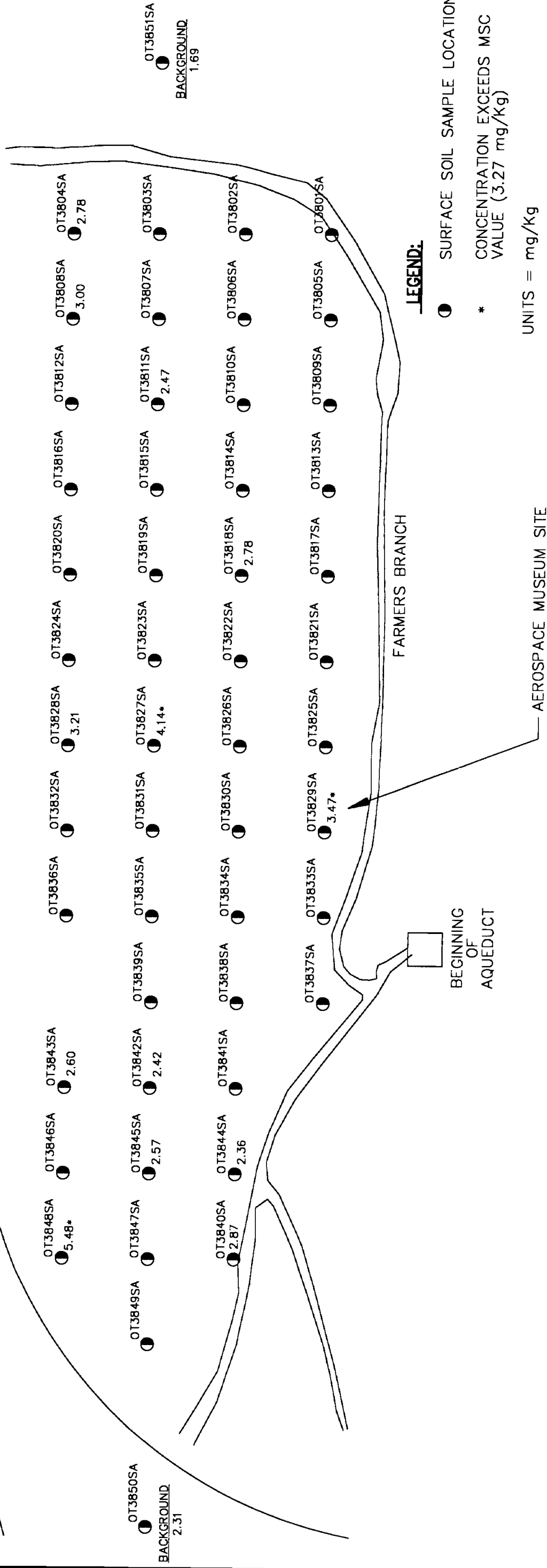
PREPARED BY: <i>SDM 7/10/96</i>	FIGURE NUMBER:
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CHECKED BY: SA 7/10/96

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SPUR 341



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

ARSENIC CONCENTRATIONS GREATER THAN BACKGROUND

AEROSPACE MUSEUM SITE

PREPARED BY: SAM 7/10/96

CHECKED BY: EAK 7/10/96

FIGURE NUMBER: 3-4

PROJECT NO. 11-3517-3209

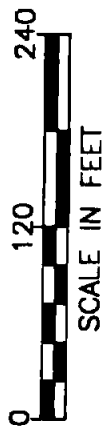
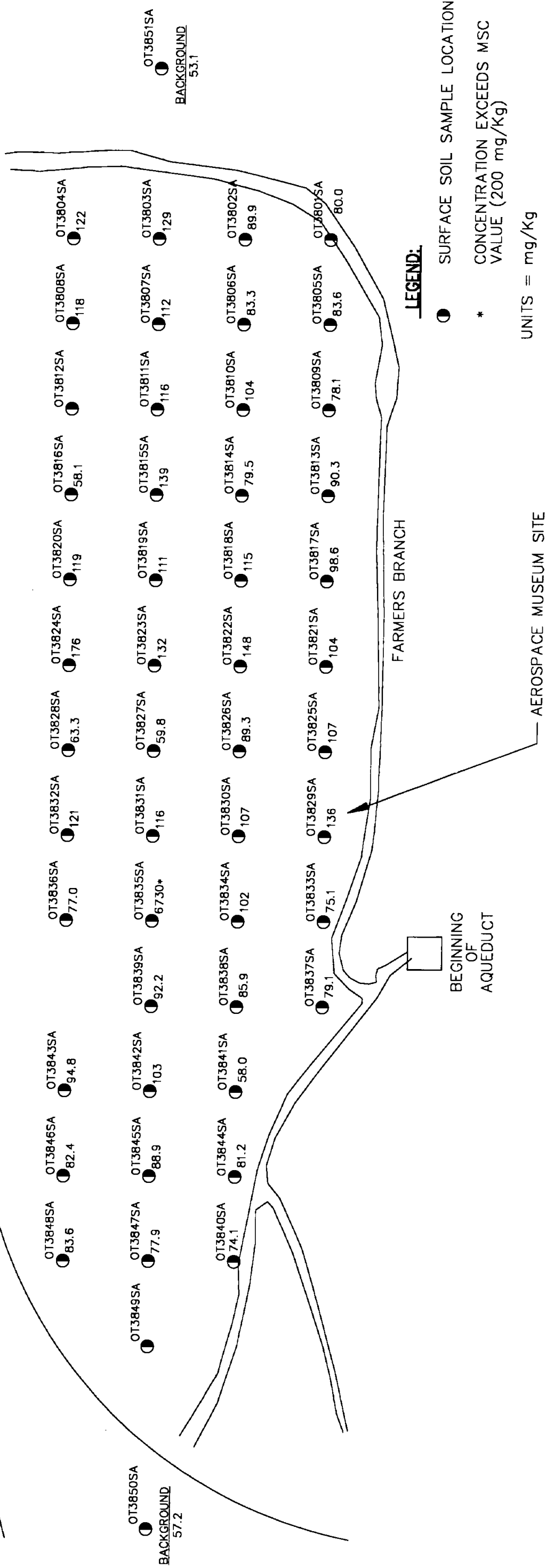
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PLOT DATE: 19 FEB 96

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SPUR 341



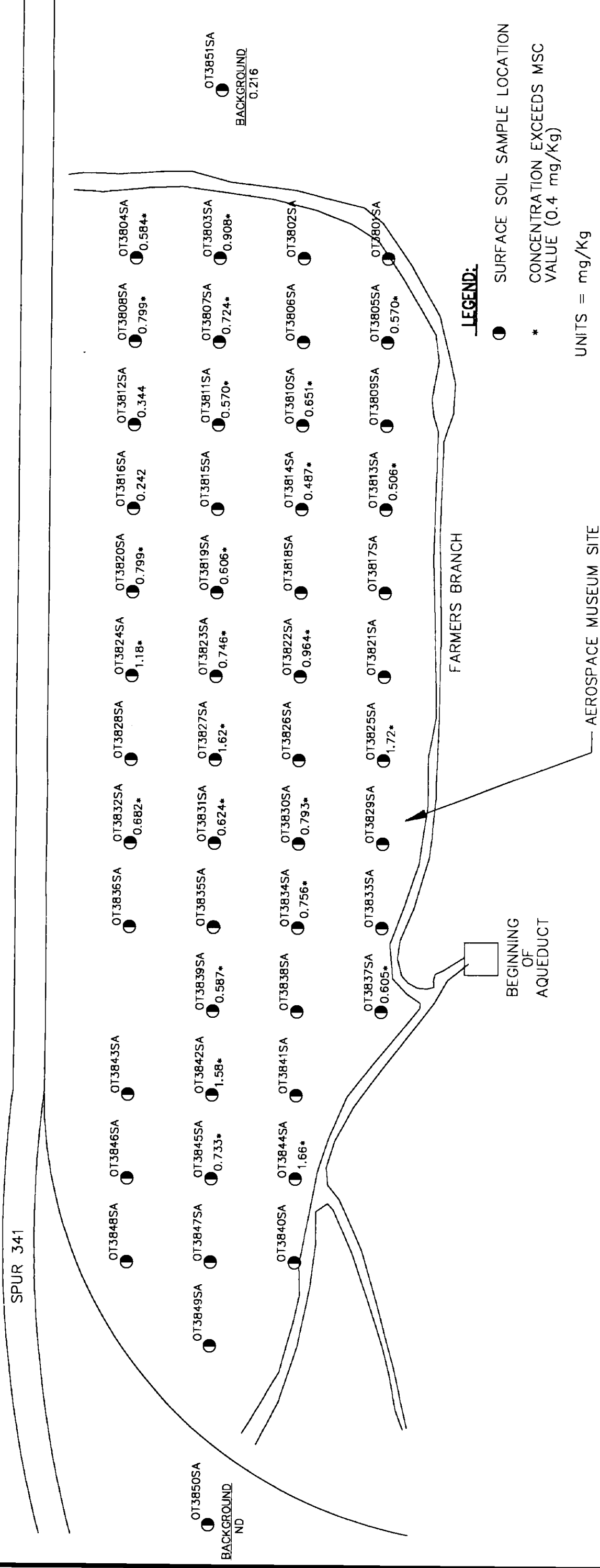
UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

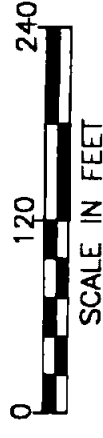
BARIUM CONCENTRATIONS GREATER THAN BACKGROUND

AEROSPACE MUSEUM SITE

PREPARED BY: <i>Sam</i>	FIGURE NUMBER: <i>7/10/96</i>	FILE DATE: 20 JAN 96
CHECKED BY: <i>SSB</i>	<i>7/16/96</i>	PLOT DATE: 19 FEB 96
PROJECT NO. 11-3517-3209	3-5	FILE NAME: AM-BARI.dwg



UNITS = mg/Kg



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

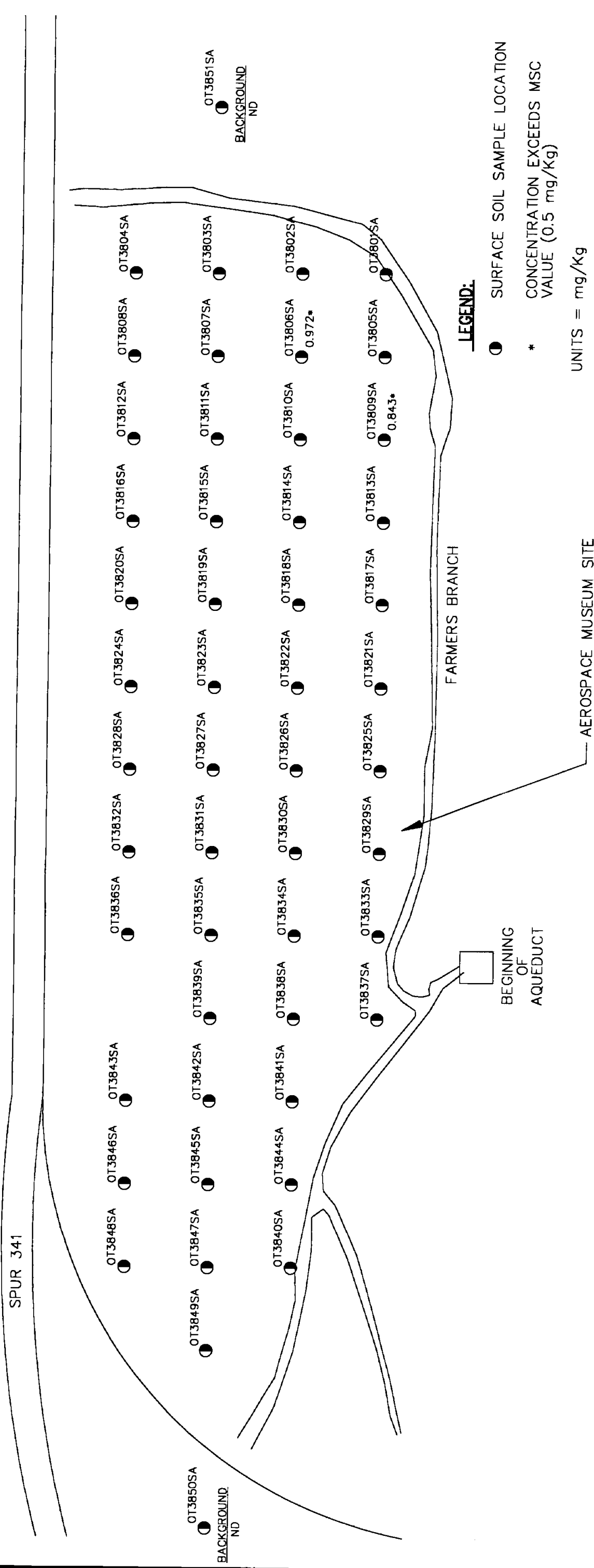
AEROSPACE MUSEUM SITE

PREPARED BY: Sam 2/12/20

CHECKED BY: 88 7/6/61

PROJECT NO. 10/96

AM-BERY.dwg



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- * CONCENTRATION EXCEEDS MSC VALUE (0.5 mg/Kg)

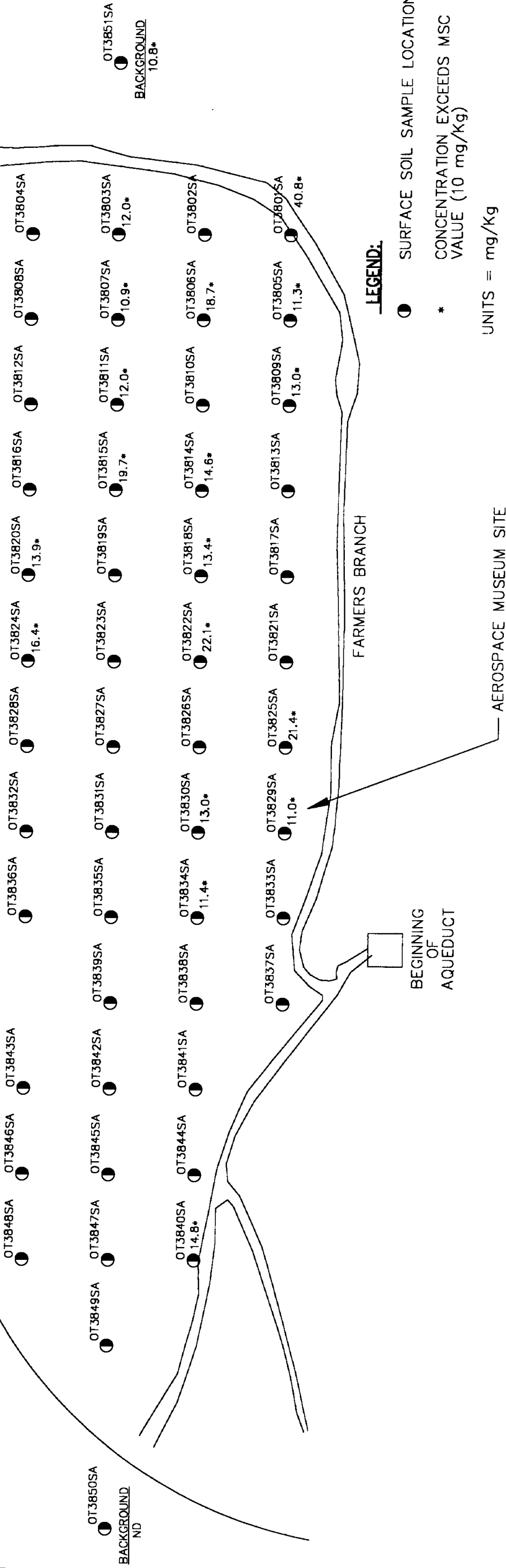
UNITS = mg/Kg



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS			
SITE CHARACTERIZATION REPORT			
CADMIUM CONCENTRATIONS GREATER THAN BACKGROUND			
AEROSPACE MUSEUM SITE			
PREPARED BY: <i>SJM</i>	FIGURE NUMBER: <i>7/10/96</i>	FILE DATE: 20.JAN.96	3-7
CHECKED BY: <i>SK</i>	PLOT DATE: <i>7/10/96</i>	PLOT DATE: 19.FEB.96	
PROJECT NO. 11-3517-3209		FILE NAME: AM-CAD.dwg	



SPUR 341



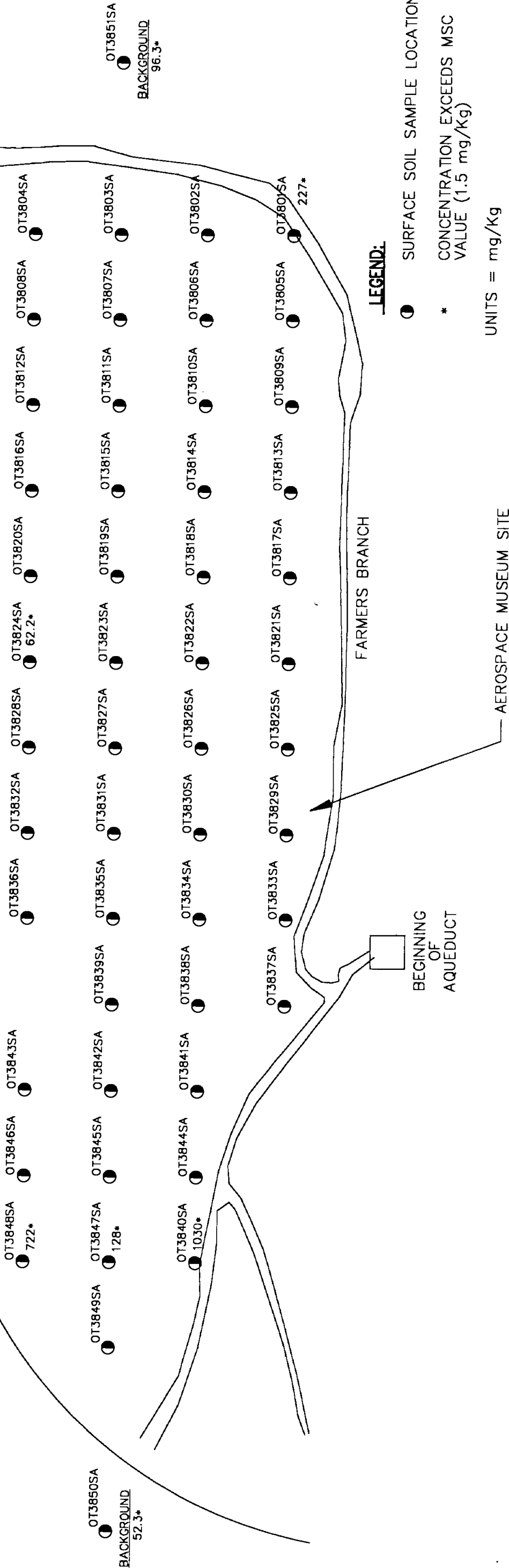
UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT
**CHROMIUM CONCENTRATIONS
GREATER THAN BACKGROUND**

AEROSPACE MUSEUM SITE		FIGURE NUMBER: 3-8	FILE DATE: 20.JAN.96
PREPARED BY: <i>SPM</i>	7/10/96	CHECKED BY: <i>ERT</i>	19.FEB.96
PROJECT NO. 11-3517-3209		FILE NAME: AM-CHROM.dwg	



SPUR 341



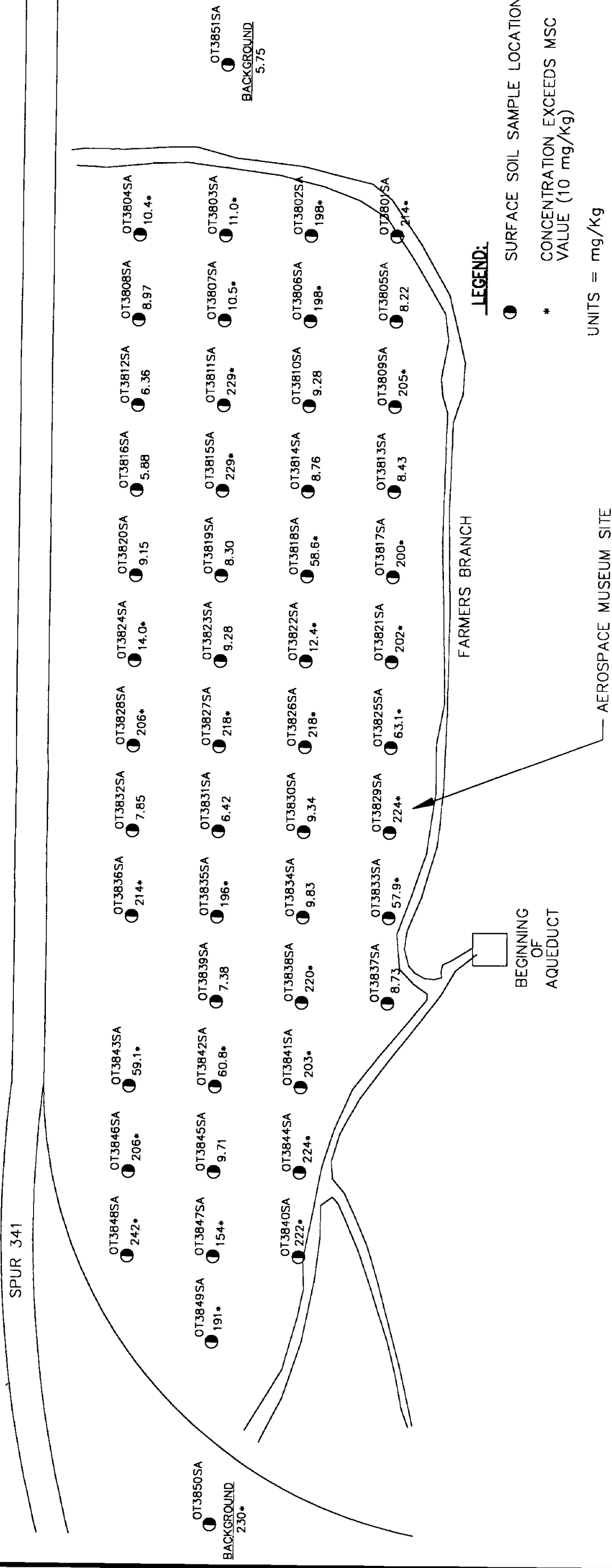
LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- * CONCENTRATION EXCEEDS MSC VALUE (1.5 mg/Kg)

UNITS = mg/Kg



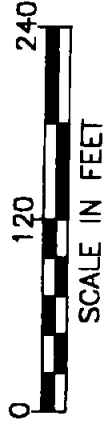
UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
LEAD CONCENTRATIONS GREATER THAN BACKGROUND	
AEROSPACE MUSEUM SITE	
PREPARED BY: <i>CDM</i>	FIGURE NUMBER: <i>7/10/96</i>
CHECKED BY: <i>CDM</i>	FILE DATE: 20 JAN 96
PROJECT NO. 11-3517-3209	PLOT DATE: 19 FEB 96
	FILE NAME: AM-LEAD.dwg



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- * CONCENTRATION EXCEEDS MSC VALUE (10 mg/kg)

UNITS = mg/kg



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

NICKEL CONCENTRATIONS GREATER THAN BACKGROUND

AEROSPACE MUSEUM SITE

PREPARED BY: <i>Salm</i>	FIGURE NUMBER:
CHECKED BY: <i>-81</i>	

PROJECT NO. 11 3517 7200
3-10

AM-NICK.dwg

260
DEVELOPMENT
AUTHORITY

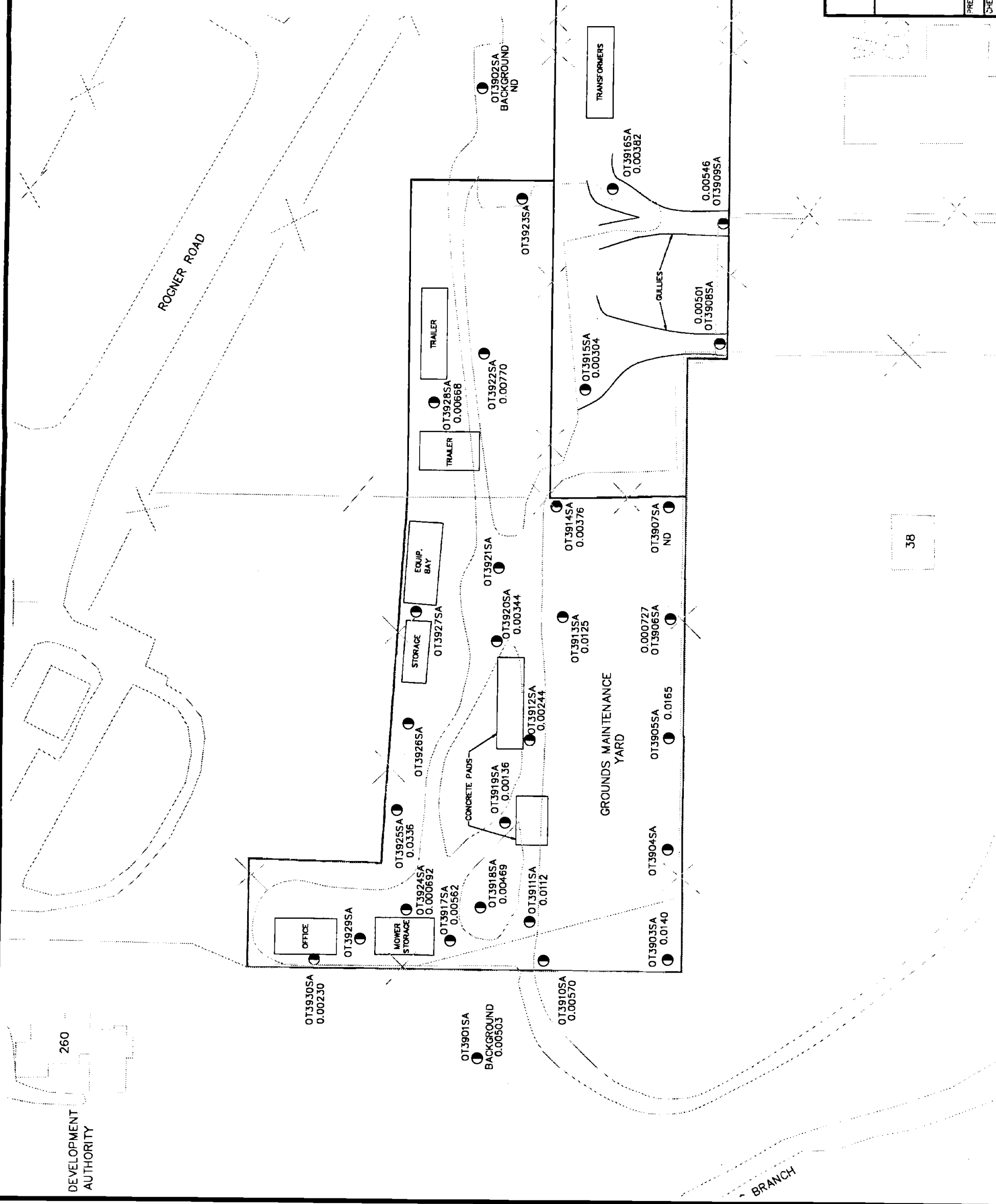


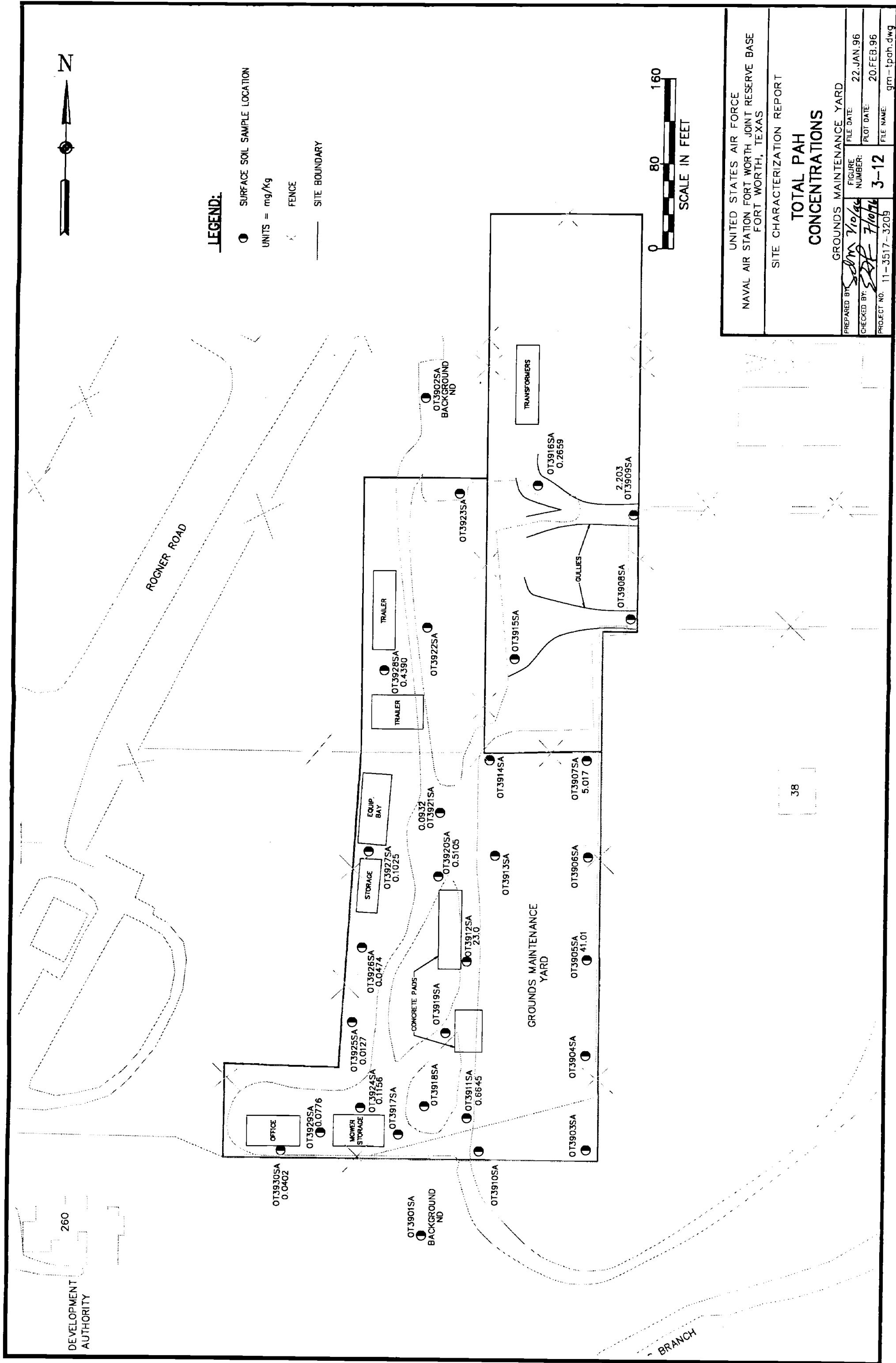
LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- ND = NOT DETECTED
- FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE	
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE	
FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
TOLUENE CONCENTRATIONS	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>SWM</i> 7/10/96	FIGURE NUMBER: 3-11
CHECKED BY: <i>EGF</i> 7/10/96	FILE DATE: 22.JAN.96
PROJECT NO. 11-3517-3209	PLOT DATE: 21.FEB.96
FILE NAME: gm-tolu.dwg	



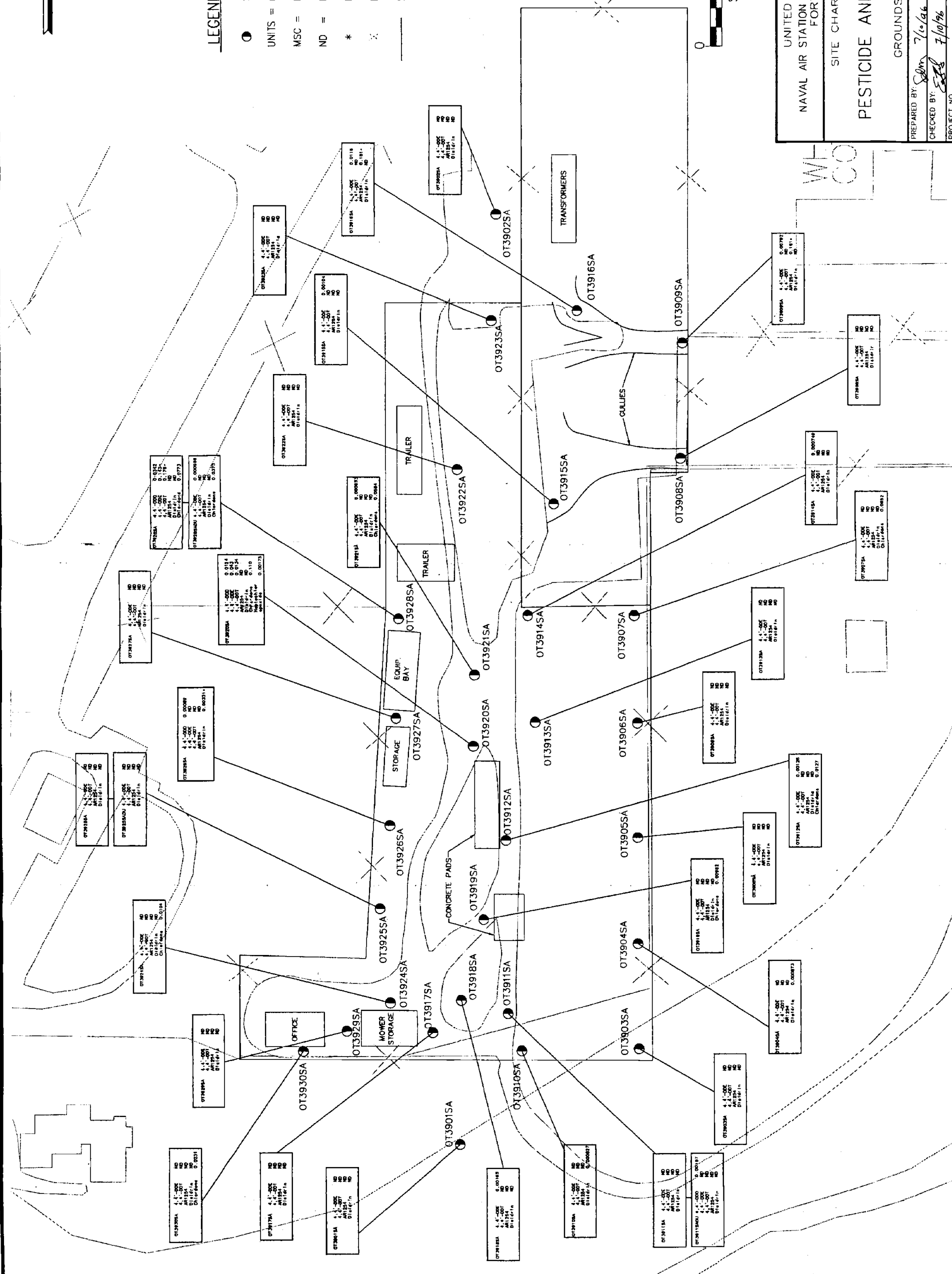
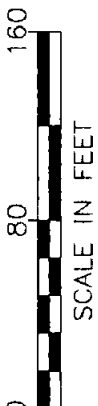


UNITED STATES AIR FORCE	
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE	
FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
TOTAL PAH CONCENTRATIONS	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>SDM 7/10/96</i>	FIGURE NUMBER: <i>3-12</i>
CHECKED BY: <i>SDP 7/10/96</i>	FILE DATE: 22 JAN. 96
PROJECT NO. 11-3517-3209	PLOT DATE: 20 FEB. 96
FILE NAME: gm-tpah.dwg	



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- ND = NOT DETECTED
- * RESULT EXCEEDS MSC VALUE
- ✕ FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
PESTICIDE AND PCB CONSTITUENTS	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>Shm</i> 7/10/96	FIGURE NUMBER: 3-13
CHECKED BY: <i>Shm</i> 7/10/96	FILE DATE: 22 JAN 96
PROJECT NO. 11-3517-3209	PLOT DATE: 21 FEB 96
	FILE NAME: gm-chem2.dwg



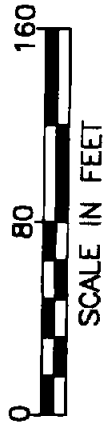
LEGEND:

① SURFACE SOIL SAMPLE LOCATION

UNITS = mg/kg

FENCE

SITE BOUNDARY



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT

MCPP AND SILVEX (2,4,5-TP)
CONCENTRATIONS

GROUNDS MAINTENANCE YARD

PREPARED BY: <i>SDM</i>	FIGURE	FILE DATE: 22 JAN 96
-------------------------	--------	----------------------

22, JAN. 30	22, JAN. 30
NUMBER:	NUMBER:
PLOT DATE:	PLOT DATE:
CHECKED BY: <i>[Signature]</i>	CHECKED BY: <i>[Signature]</i>
7/6/71	7/6/71

PROJECT NO.	11-3517-3209	3-14	FILE NAME:	gm--slvr.dwg
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85

OT3901SA

OT3910SA

OT3903SA

OT3904SA

OT3906SA

OT3907SA

100-100000

OT3914SA

ATTORNEY

0T3918:

OT3919SA

013921

922SA

25A

GROUND'S MAINTENANCE

TRANSFORMERS

OT3916SA

7- GULLING

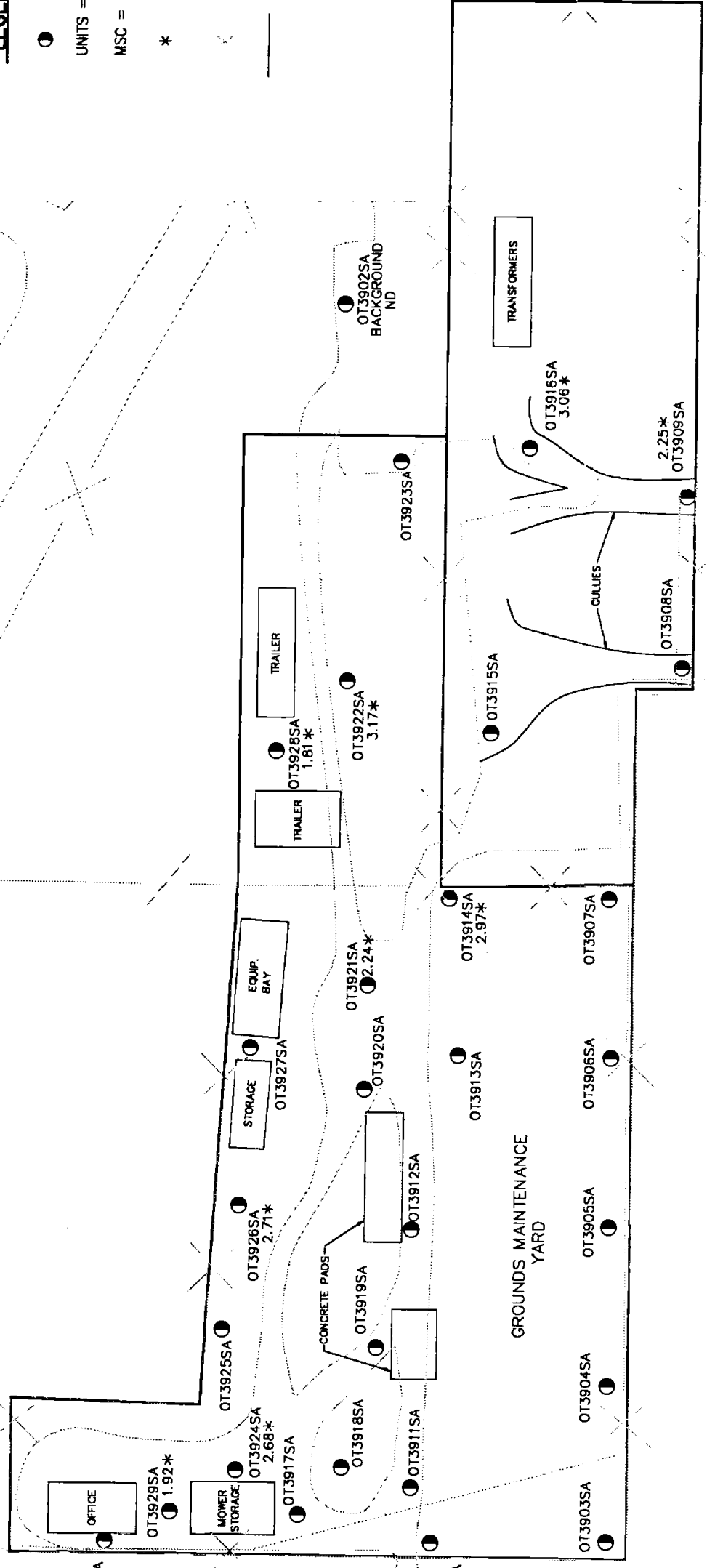
0T3909SA

260
DEVELOPMENT
AUTHORITY



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (0.6 mg/Kg)
- X FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
ANTIMONY CONCENTRATIONS GREATER THAN BACKGROUND	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>Edm 7/10/96</i>	FIGURE NUMBER: <i>3-15</i>
CHECKED BY: <i>EST 7/10/96</i>	FILE DATE: 22.JAN.96
PROJECT NO. 11-3517-3209	PLOT DATE: 14.FEB.96
FILE NAME: gm-anti.dwg	



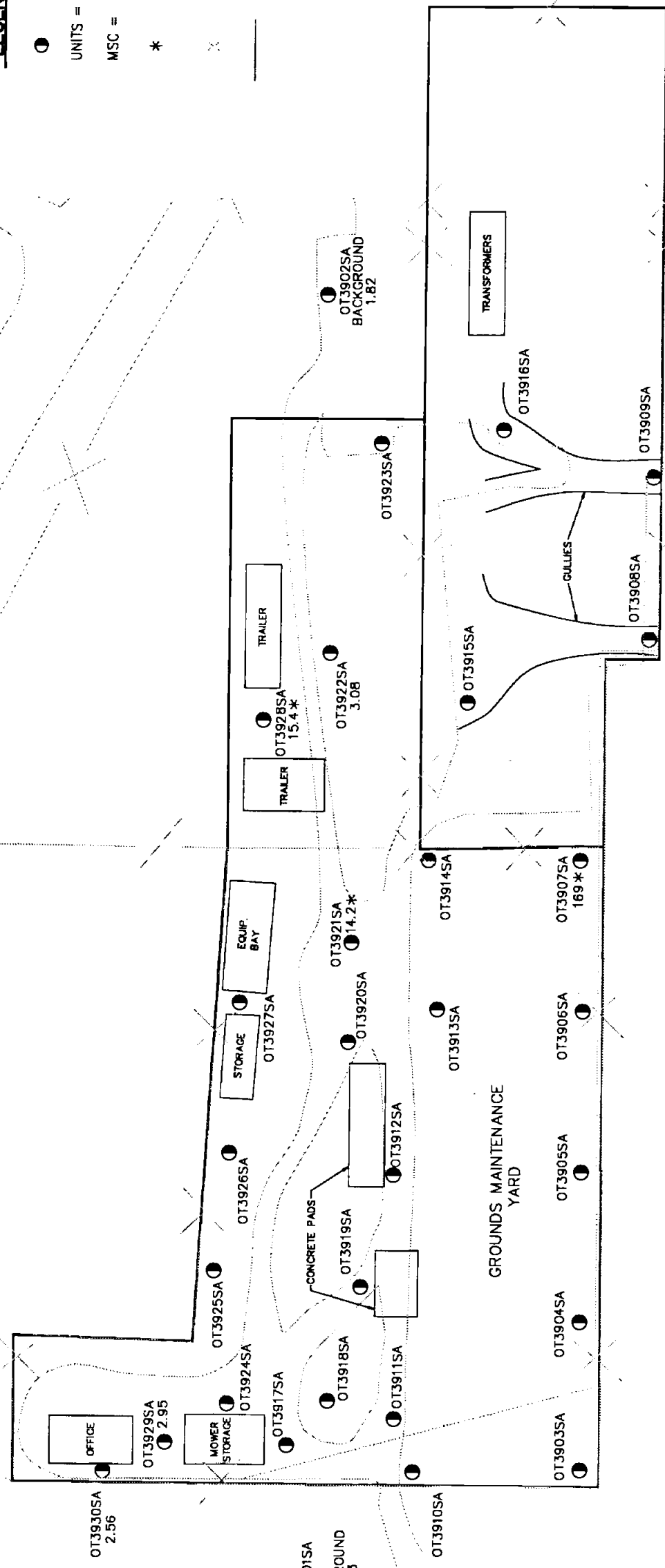
LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (3.27 mg/kg)
- FENCE
- SITE BOUNDARY



260
DEVELOPMENT
AUTHORITY

ROGNER ROAD



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT
**ARSENIC CONCENTRATIONS
GREATER THAN BACKGROUND**

FIGURE NUMBER: 3-16

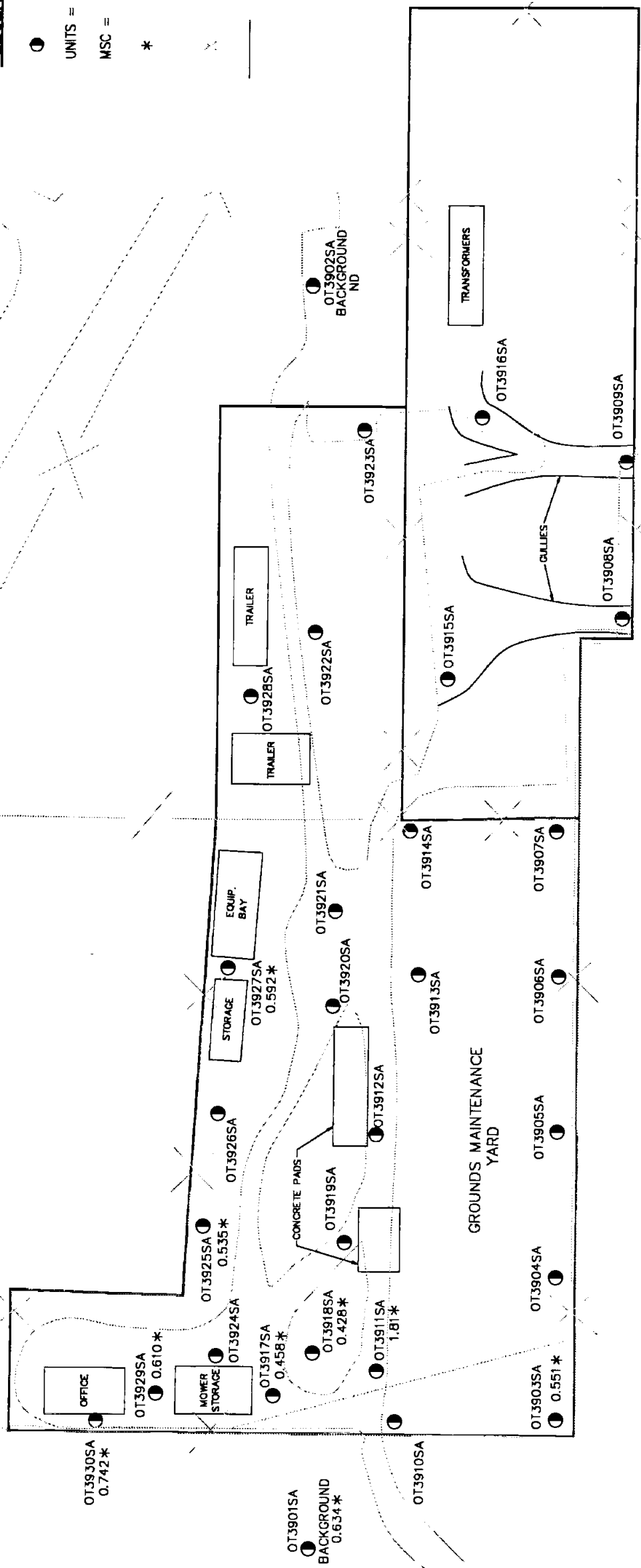
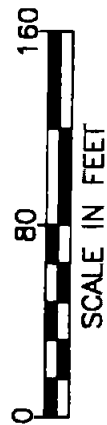
PREPARED BY: <i>SWM</i>	FILE DATE: 22 JAN 96
CHECKED BY: <i>SSG</i>	PLOT DATE: 20 FEB 96
PROJECT NO. 11-3517-3209	FILE NAME: gm-ar-se.dwg

260
DEVELOPMENT
AUTHORITY



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (0.4 mg/Kg)
- X FENCE
- SITE BOUNDARY



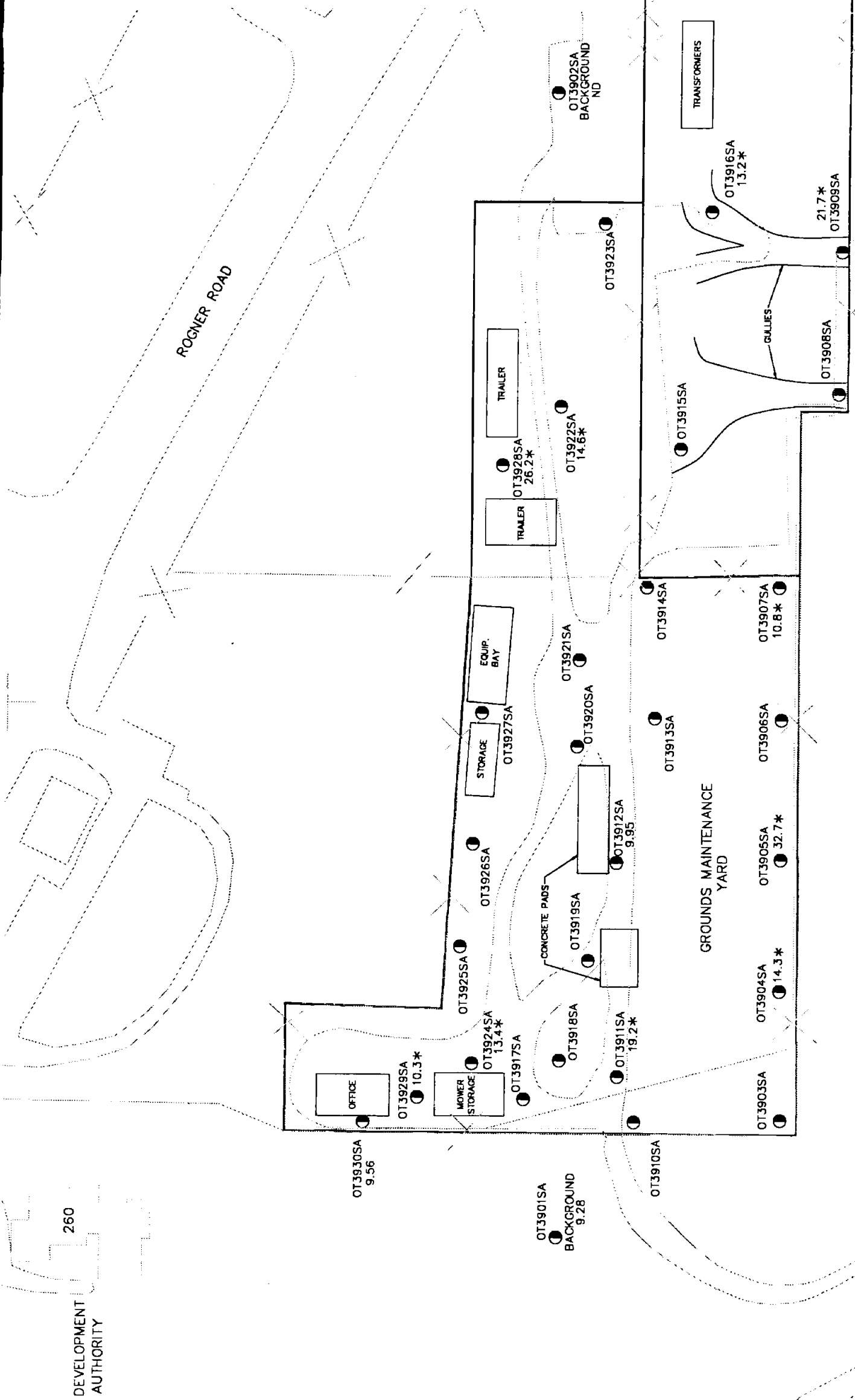
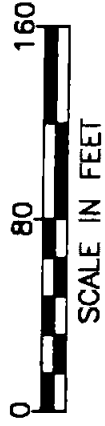
UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
BERYLLIUM CONCENTRATIONS GREATER THAN BACKGROUND	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>Edm 7/10/96</i>	FIGURE NUMBER: <i>3-17</i>
CHECKED BY: <i>Edm 7/10/96</i>	FILE DATE: 22 JAN 96
PROJECT NO: 11-3517-3209	PLOT DATE: 20 FEB 96
	FILE NAME: gm-bery.dwg

260
DEVELOPMENT
AUTHORITY



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (10 mg/Kg)
- ✕ FENCE
- SITE BOUNDARY



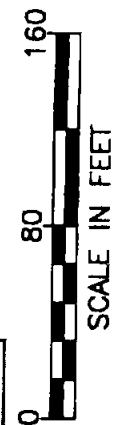
UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
CHROMIUM CONCENTRATIONS GREATER THAN BACKGROUND	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>SDM</i> 7/10/96	FIGURE NUMBER: 3-18
CHECKED BY: <i>SDM</i> 7/10/96	FILE DATE: 22 JAN 96
PROJECT NO. 11-3517-3209	PLOT DATE: 20 FEB 96
	FILE NAME: gm-chrm.dwg

260
DEVELOPMENT
AUTHORITY

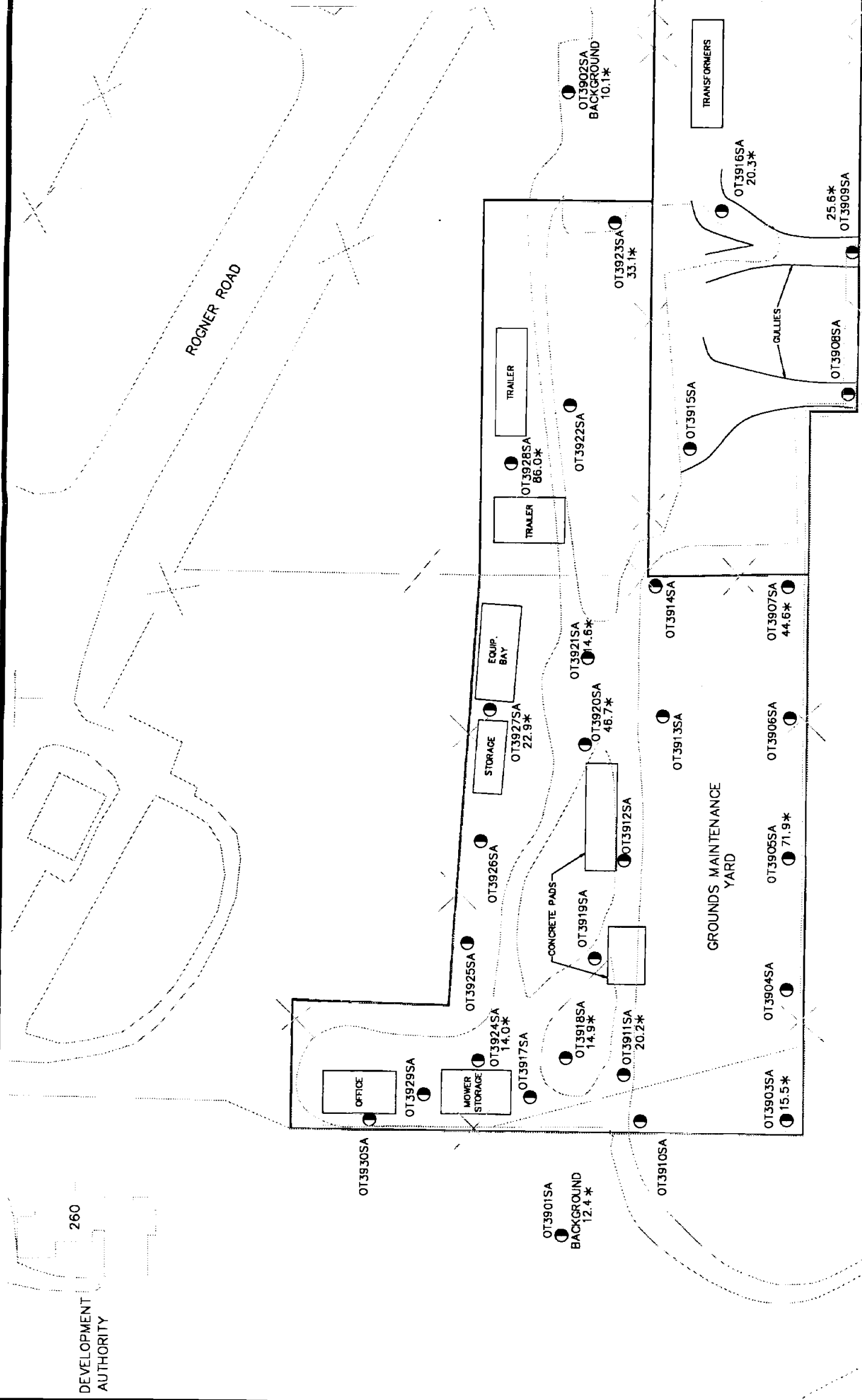


LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (1.5mg/kg)
- X FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
LEAD CONCENTRATIONS GREATER THAN BACKGROUND	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>Edm 7/10/96</i>	FIGURE NUMBER: <i>3-19</i>
CHECKED BY: <i>SBT 7/10/96</i>	FILE DATE: 22 JAN 96
PROJECT NO: 11-3517-3209	PLOT DATE: 20 FEB 96
	FILE NAME: gm-lead.dwg



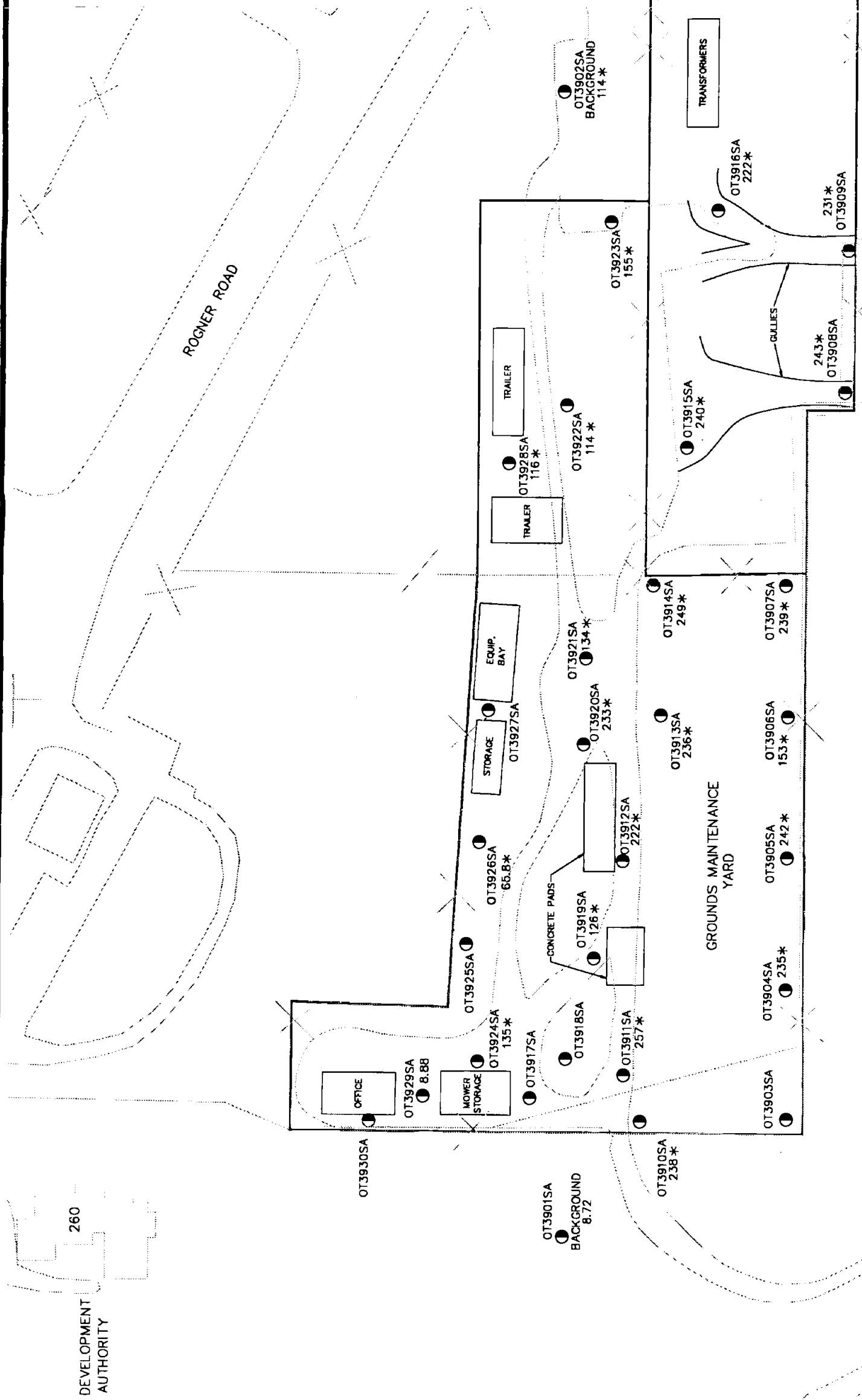
DEVELOPMENT
AUTHORITY

260



LEGEND:

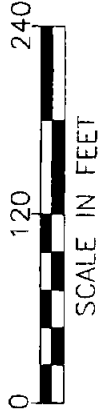
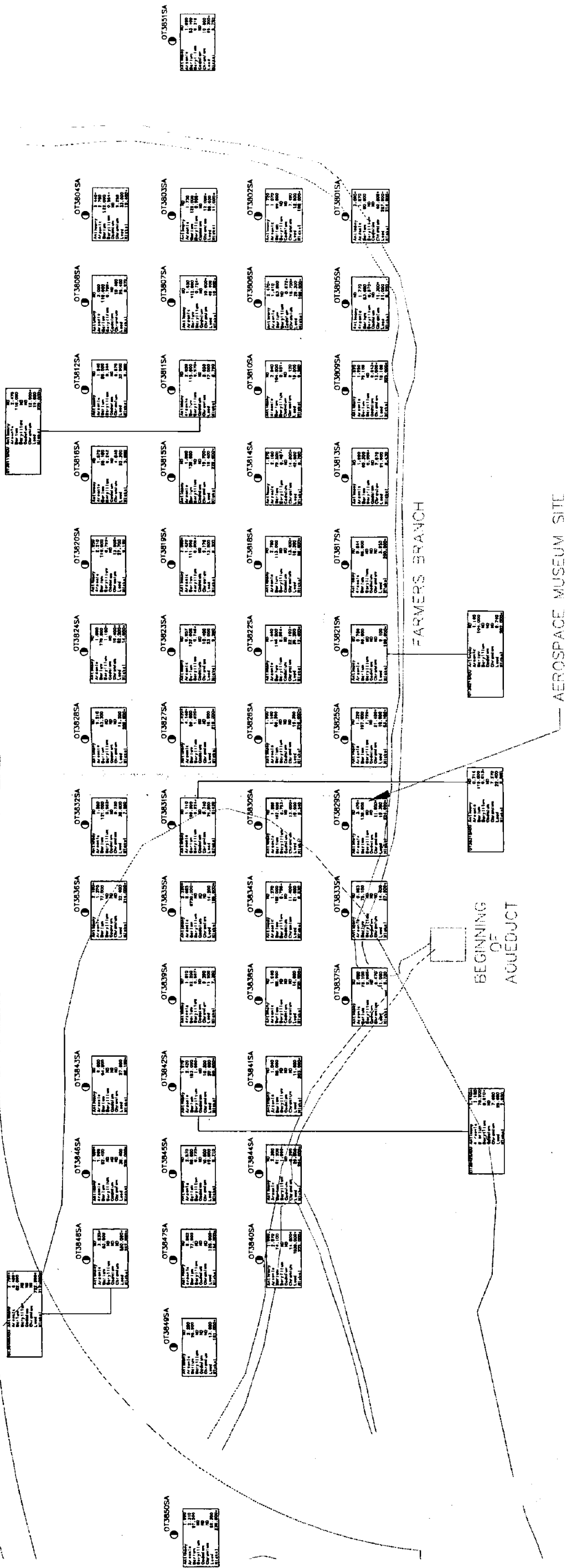
- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * CONCENTRATION EXCEEDS MSC VALUE (10mg/Kg)
- X FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
NICKEL CONCENTRATIONS GREATER THAN BACKGROUND	
GROUNDS MAINTENANCE YARD	
PREPARED BY: <i>CDM</i> 7/10/96	FIGURE NUMBER: 3-20
CHECKED BY: <i>CDM</i> 7/10/96	FILE DATE: 22 JAN 96
PROJECT NO. 11-3517-3209	PLOT DATE: 20 FEB 96
FILE NAME: gmm-nick.dwg	



SPUR 341



LEGEND:

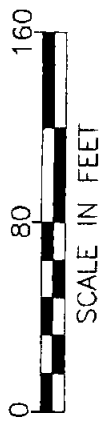
- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/Kg
- ND = NOT DETECTED
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- * RESULT EXCEEDS BOTH BACKGROUND CONCENTRATION AND MSC VALUE

UNITED STATES AIR FORCE NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE FORT WORTH, TEXAS	
SITE CHARACTERIZATION REPORT	
METAL CONSTITUENTS EXCEEDING BACKGROUND CONCENTRATIONS AND MSC VALUES	
AEROSPACE MUSEUM SITE	
PREPARED BY: <i>SM</i>	FILE DATE: 20 JAN 96
CHECKED BY: <i>ESB</i>	PLOT DATE: 21 FEB 96
FIGURE NUMBER: 4-1	
PROJECT NO: 11-3517-3209	
FILE NAME: AM-CHEM1.dwg	



LEGEND:

- SURFACE SOIL SAMPLE LOCATION
- UNITS = mg/kg
- MSC = MEDIUM-SPECIFIC CONCENTRATION
- ND = NOT DETECTED
- * RESULT EXCEEDS BOTH BACKGROUND CONCENTRATION AND MSC VALUE
- FENCE
- SITE BOUNDARY



UNITED STATES AIR FORCE
NAVAL AIR STATION FORT WORTH JOINT RESERVE BASE
FORT WORTH, TEXAS

SITE CHARACTERIZATION REPORT
METAL CONSTITUENTS EXCEEDING
BACKGROUND CONCENTRATIONS
AND MSC VALUES

PREPARED BY: *SDM* 7/10/96

FIGURE NUMBER: 4-2

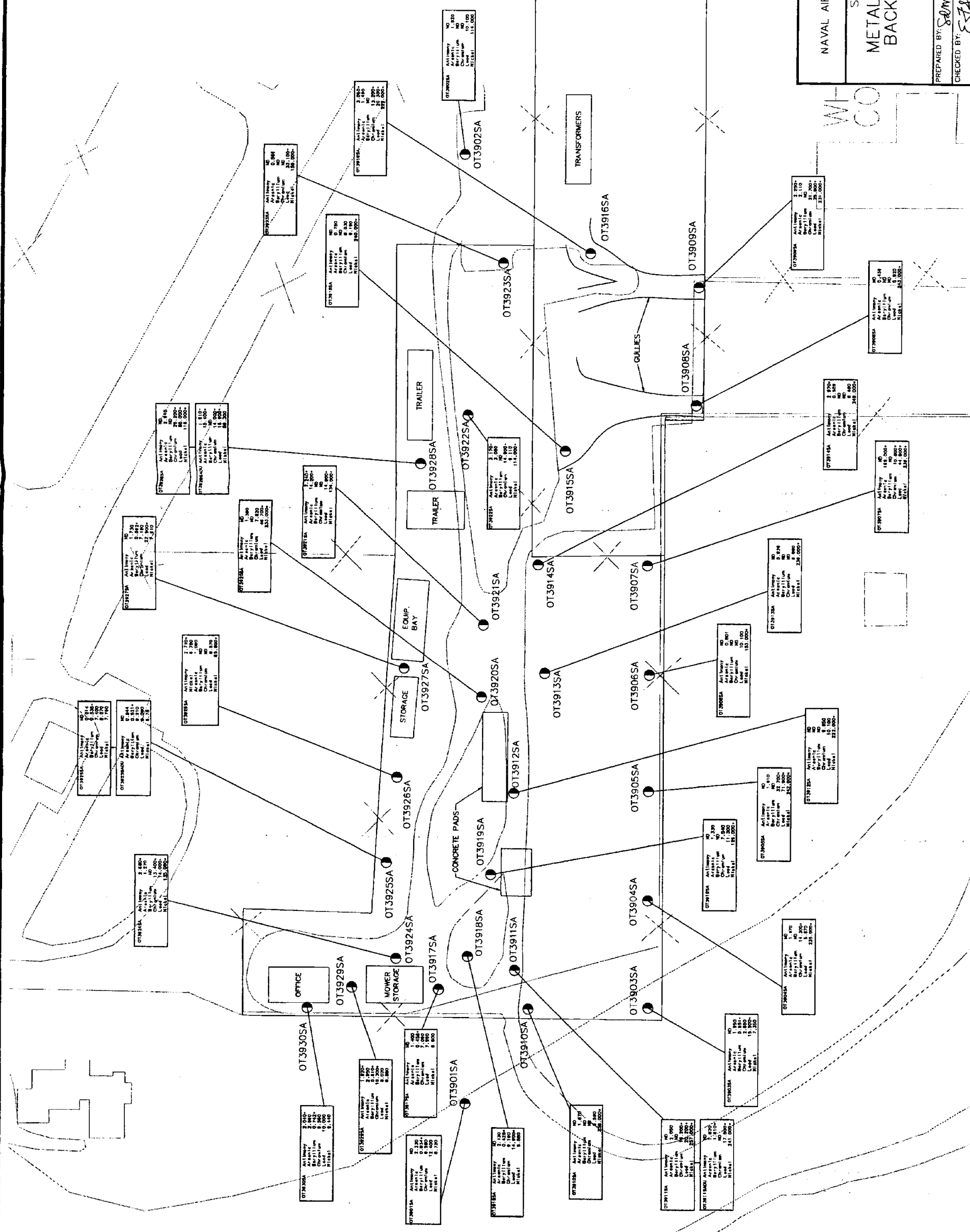
CHECKED BY: *ESB* 7/10/96

PROJECT NO 11-3517-3209

FILE DATE: 22 JAN 96

PLOT DATE: 21 FEB 96

FILE NAME: gm-chem1.dwg



TAB

Appendix A

APPENDIX A**CHAIN-OF-CUSTODY FORMS**



ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

01437C

SAMPLING INFORMATION
NAME OF FACILITY: Caswell AFB
STREET ADDRESS: Fort Walton, FL
NPDES NUMBER: _____

PROJECT NAME		JOB NO.	TOTAL NO. OF CONTAINERS		CONTAINER TYPE	CONTAINER TYPE										LEN LAB NO.		
SAMPLERS (SIGNATURE)		11-2512-3201																
SAMPLING DATE		10/22/95																
TIME	CS	CS	SOURCE CODE	SAMPLE STATION DESCRIPTION		40 ml G VOA HCl	1.6 g AMBER	2.0 g G. W/M	1.6 g (H ₂ SO ₄)	50 ml AMBER	1.6 g (HNO ₃)	1.6 g (H ₂ SO ₄)	1.6 g (NaOH + Ascorbic Acid)	1.6 g (H ₂ SO ₄ + NaOH)	4.0 g PL W/M	250 ml PL	1.6 g TEGON	LEN LAB NO.
0955	X		50	OT3803SA		4	2	2										
0955	X		50	OT3802SA		4	2	2										
1010	X		50	OT3805SA		4	2	2										
1000	X		50	OT3807SA		4	2	2										
1010	X		50	OT3806SA		4	2	2										
1045	X		50	OT3811SA		4	2	2										
1105	X		50	OT3815SA		4	2	2										
1105	X		50	OT3815SA MSD		3	2	1										
1105	X		50	OT3815SA MSD		3	2	1										
1045	X		50	OT3812SA		4	2	2										
1055	X		50	OT3816SA		4	2	2										

RELINQUISHED BY: Jim J. [Signature] DATE / TIME: 10/25/95 1800
RECEIVED BY: _____ DATE / TIME: _____
(SIGNATURE) (SIGNATURE)

DISTRIBUTION: ORIGINAL AND YELLOW COPIES ACCOMPANY SAMPLE SHIPMENT TO LABORATORY.
PINK COPY RETAINED BY SAMPLERS. YELLOW COPY RETAINED BY LABORATORY.

REMARKS

19. 105 2

Felix # 9778369946

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

#5

01438

SAMPLING INFORMATION
NAME OF FACILITY: Caswell AFB
STREET ADDRESS: Fort Liberty, TX
NPDES NUMBER: _____

PROJECT NAME		JOB NO.	TOTAL NO. OF CONTAINERS		CONTAINER TYPE	DATE / TIME										RECEIVED BY	DATE / TIME
SAMPLERS (SIGNATURE)																	
SAMPLING DATE																	
TIME	BY	DATE	SOURCE CODE	SAMPLE STATION DESCRIPTION		40 ml G VOA HCL	8 oz G WVA	1 L G (H ₂ SO ₄)	1 L PL (HNO ₃)	1 L PL (H ₂ SO ₄)	1 L PL (HNO ₃ +Ascorbic Acid)	1 L PL (2% Acetic + HNO ₃)	4 oz PL WVA	250 ml PL	1 L TETON	LEML LAB NO.	
1530	X		50	OT38385A	4		22										
1450	X		50	OT38305A	4		22										
1135	X		50	OT38205A	4		22										
1135	X		50	OT38205AMS	4		22										
1135	X		50	OT38205AMS	4		22										
1145	X		50	OT38195A	4		22										
0955	X		50	OT38015A	4		22										
1155	X		50	OT38185A	4		22										
1200	X		50	OT38175A	4		22										
1000	X		50	OT38085A	4		22										
0945	X		50	OT38045A	4		22										

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PINK COPY RETAINED BY SAMPLERS. YELLOW COPY RETAINED BY LABORATORY.

REMARKS

Pg. 1 of 2

8X # 9778369937

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW



LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

#4

11439

PROJECT NAME		JOB NO.	SAMPLING INFORMATION		NAME OF FACILITY		STREET ADDRESS		NPDES NUMBER	
SAMPLERS (SIGNATURE)		SAMPLING DATE		TOTAL NO. OF CONTAINERS		CONTAINER TYPE		LEAD LAB NO.		
TIME	DATE	TIME	DATE	TIME	DATE	CONTAINER TYPE	LEAD LAB NO.	DATE	TIME	
1630	X	50	OT 3848 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1505	X	50	OT 3836 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1600	X	50	OT 3843 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1430	X	50	OT 3828 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
0730	X	50	FDUP-05	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
0730	X	50	FDUP-03	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1500	X	50	OT 3829 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1450	X	50	OT 3831 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1540	X	50	OT 3839 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1640	X	50	OT 3849 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	
1530	X	50	OT 3837 SA	4	22	40 ml. VOA HCl	202 G. W/M	1.6 (H ₂ SO ₄)	1.6 (H ₂ SO ₄)	

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
J. K. 2	10/22/95	10/23/95	1800				

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
J. K. 2	10/22/95		

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
J. K. 2	10/22/95		

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REMARKS

10/22/95

10/22/95

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

3

01440

SAMPLING INFORMATION	NAME OF FACILITY: <u>Camell AFB</u>
	STREET ADDRESS: <u>Fort Worth, TX</u>
NPDES NUMBER	

PROJECT NAME <u>Camell AFB</u>		JOB NO. <u>11-2517-3201</u>
SAMPLERS (SIGNATURE) <u>[Signature]</u>		
SAMPLING DATE <u>10/22/95</u>		
TIME	SOURCE CODE	SAMPLE STATION DESCRIPTION
1400	X 50	OT 38 23 SA
1425	X 50	OT 38 26 SA
1415	X 50	OT 38 21 SA
1540	X 50	OT 38 41 SA
0730	X 50	FDUP - OH
1515	X 50	OT 38 35 SA
1525	X 50	OT 38 33 SA
1620	X 50	OT 38 47 SA
1525	X 50	OT 38 34 SA
1625	X 50	OT 38 46 SA

TOTAL NO. OF CONTAINERS		CONTAINER TYPE	40 ML G VOA HCL	1 L G VOA HCL	200 G W/M	1 L G (H ₂ SO ₄)	500 ML AMBER	1 L PL (HNO ₃)	1 L PL (H ₂ SO ₄)	1 L PL (NaOH + Acetic Acid (pH 4))	1 L PL (2N Acetic Acid + NaOH)	400 PL W/M	250 ML PL	1 L TETRA	LEML LAB NO.
4															
4															
4															
4															
4															
4															
4															
4															
4															
4															

RELINQUISHED BY: <u>[Signature]</u>	DATE / TIME <u>10/24/95</u>	RECEIVED BY: <u>[Signature]</u>	DATE / TIME <u>10/24/95</u>
--	--------------------------------	------------------------------------	--------------------------------

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REMARKS: _____

2X # 9228369912

*SOURCE CODES
RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW



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CHAIN OF CUSTODY RECORD

#2

U1441C

SAMPLING INFORMATION
NAME OF FACILITY: Caswell AFB
STREET ADDRESS: Fort Belvoir, TX
NPDES NUMBER: _____

PROJECT NAME		JOB NO.	CONTAINERS		CONTAINER TYPE	ANALYSIS										LEAD LAB NO.	
SAMPLERS (SIGNATURE)			TOTAL NO. OF			40 ml G VOA HCl	1.6 g AMBER	2 oz G. W.M.	1.6 g H ₂ O	500 ml AMBER	1 L PL (HNO ₃)	1 L PL (NaOH+Ascorbic Acid)	1 L PL (2 Acetic + NaOH)	4 oz PL W.M.	250 ml PL	1 L TEFON	
TIME	DATE	SOURCE CODE	SAMPLE STATION DESCRIPTION														
1610	X	50	OT 38 45 SA		4	2	2										
1550	X	50	OT 38 42 SA		4	2	2										
1430	X	50	OT 38 27 SA		4	2	2										
1420	X	50	OT 38 25 SA		4	2	2										
1440	X	50	OT 38 32 SA		4	2	2										
1640	X	50	OT 38 40 ^{SA} MS		3	2	1										
1640	X	50	OT 38 40 SA MSD		3	2	1										
0730	X	50	FDUP-02		4	2	2										
1605	X	50	OT 38 44 SA		4	2	2										
1355	X	50	OT 38 24 SA		4	2	2										
1410	X	50	OT 38 22 SA		4	2	2										

RELINQUISHED BY: Per J No DATE / TIME 10/22/95 1800
RECEIVED BY: Per J No DATE / TIME 10/23/95 1800
(SIGNATURE) (SIGNATURE)

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REMARKS

Per J No

Fedex # 9778369903

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



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NATIONAL LABORATORIES
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PENSACOLA, FLORIDA 32526
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CHAIN OF CUSTODY RECORD

#7

01436

SAMPLING INFORMATION
NAME OF FACILITY: Carroll AFB
STREET ADDRESS: Fort Worth, TX
NPDES NUMBER: _____

PROJECT NAME		JOB NO.	TOTAL NO. OF CONTAINERS		CONTAINER TYPE	RECEIVED BY LABORATORY										DATE / TIME		
SAMPLERS (SIGNATURE)						(SIGNATURE)												
SAMPLING DATE		SAMPLE STATION DESCRIPTION																
TIME	GR	CO	SOURCE CODE			40 ml G VOA HCl	1.0 g AMBER	2.0 g G. W.M.	1.0 g (H ₂ SO ₄)	1.0 ml AMBER	1.0 ml (HNO ₃)	1.0 ml (H ₂ SO ₄)	1.0 ml (NaOH + Ascorbic Acid)	1.0 ml (H ₂ O ₂ + NaOH)	250 ml PL	1.0 ml Teflon	LEAD LAB NO	
1115	X		50		OT 38145A	4	2											
1120	X		50		OT 38135A	4	2											
1450	X		50		OT 38305AMS	3	2											
1450	X		50		OT 38305AMS	3	2											
1640	X		50		OT 38405A	4	2											
1040	X		50		OT 380105A	4	2											
0730	X		50		^{34k} OT F DUP-01	4	2											
1030	X		50		OT 38095A	4	2											
1012345	X		50		OT 39045A	4	2											
1545	X		50		OT 39015A	4	2											
1012345	X		50		OT 39065A	4	2											
1445	X		50															

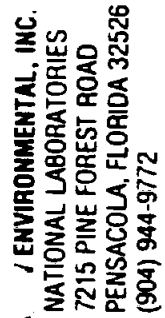
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REMARKS

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA

Box # 9778369755



CHAIN OF CUSTODY RECORD

8#

2442

SAMPLING INFORMATION

NAME OF FACILITY: Casswell AFB

STREET ADDRESS: Fort Liberty, Va

NPDES NUMBER

[illegible]

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REMARKS

EQB-1 Collected 10/22/95
ILL. PL 2HNO_3 ARE NOT preserved to pH 2
Index # -82+3456692-JK 977836964

SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



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CHAIN OF CUSTODY RECORD

1

01435

SAMPLING INFORMATION
NAME OF FACILITY: Carroll AFB
STREET ADDRESS: Fort Worth, TX
NPDES NUMBER

PROJECT NAME		JOB NO.	CONTAINER TYPE		TOTAL NO. OF CONTAINERS	CONTAINER TYPE										DATE / TIME	RECEIVED BY	DATE / TIME	RECEIVED BY
SAMPLERS (SIGNATURE)			SAMPLING DATE			SAMPLING DATE													
TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE		
1425	X	50	OT 39 05 SA	4	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1535	X	50	OT 39 18 SA	4	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1508	X	50	OT 39 05 SA	4	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1535	X	50	OT 39 17 SA	4	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
0730	X	50	OT 39 11 SA	4	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1516	X	50	OT 39 13 SA	2	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1530	X	50	OT 39 13 SA MS	2	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		
1530	X	50	OT 39 13 SA MS	2	40 ml GVA HCL	8.2 G. W/M	2.02 G. W/M	11 G. W/M	500 ml - AMBER	1 L. PL (HNO ₃)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)	1 L. PL (H ₂ SO ₄)		

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REMARKS

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW

8213256092



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CHAIN OF CUSTODY RECORD

#5

01418C

SAMPLING INFORMATION
NAME OF FACILITY: Carswell AFB
STREET ADDRESS: Fort Worth, TX.
NPDES NUMBER

PROJECT NAME		JOB NO.	TOTAL NO. OF CONTAINERS		CONTAINER TYPE	ANALYSIS												DATE / TIME																					
SAMPLERS (SIGNATURE)			1-3510-3209			40 ml G VOA HCl	1 L G VOA HCl	8 oz G W/M	2 oz G W/M	1 L G W/M	500 ml (H ₂ SO ₄)	1 L PL (HNO ₃)	1 L PL (H ₂ SO ₄)	1 L PL (HNO ₃ + Ascorbic Acid)	1 L PL (2N K ₂ Cr ₂ O ₇ + NaOH)	4 oz PL W/M	250 ml PL	1 L Teflon	LEAD LAB NO.																				
TIME	BY	COMP	SOURCE CODE	SAMPLE STATION DESCRIPTION																																			
0910	X		50	OT 38515A	4																																		

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
<u>Jim J. K. G.</u>	<u>10/23/95</u>	<u>10/23/95</u>	<u>1800</u>

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
(SIGNATURE)	(SIGNATURE)	(SIGNATURE)	(SIGNATURE)

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REMARKS

Py 2 of 2
Fedex # 9778369937

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



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CHAIN OF CUSTODY RECORD

#4

11419

SAMPLING INFORMATION	NAME OF FACILITY	Carswell AFB
	STREET ADDRESS	Fort Worth, TX
NPDES NUMBER		

PROJECT NAME		JOB NO.	TOTAL NO OF CONTAINERS	CONTAINER TYPE	SAMPLE STATION DESCRIPTION	TIME	SOURCE CODE	TIME	LENL LAB NO.
CARSWELL AFB		11-3517-3209							
SAMPLERS (SIGNATURE)		[Signature]							
SAMPLING DATE		10/23/95							
0830	X	50	2	1 G. AMBER	OT 3850 SA				
0830	X	50	2	1 G. AMBER	OT 3850 SAMS				
0830	X	50	2	1 G. AMBER	OT 3850 SAMS				
[Large diagonal line across remaining rows]									

RELINQUISHED BY	DATE / TIME	RECEIVED BY	DATE / TIME	RECEIVED BY LABORATORY	DATE / TIME
[Signature]	10/23/95 1800	[Signature]			

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REMARKS

Pg. 2 of 2

JEX # 977896921

- *SOURCE CODES
- RECOVERY WELL - RW
 - RCRA MONITORING WELL - MW
 - SOIL / SEDIMENT - SO
 - SLUDGE - SL
 - NPDES DISCHARGE - ND
 - DRINKING WATER - DW
 - HAZARDOUS WASTE - HW
 - SURFACE WATER - SW



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CHAIN OF CUSTODY RECORD

#2

01420

SAMPLING INFORMATION

NAME OF FACILITY: Carswell AFB
STREET ADDRESS: Fort Worth, Tx
NPDES NUMBER

PROJECT NAME		JOB NO.	CONTAINER TYPE		TOTAL NO OF CONTAINERS		SAMPLE STATION DESCRIPTION		DATE / TIME		RECEIVED BY		DATE / TIME		
TIME	DATE	SOURCE CODE	40 ml G VOA HCl	1 L G - AMBER	2 oz G. W/M	1 L G (H ₂ SO ₄)	300 ml. AMBER	1 L PL (HNO ₃)	1 L PL (H ₂ SO ₄)	1 L PL (NaOH + Ascorbic Acid)	1 L PL (2.0% NaOH + NaOH)	4 oz PL W/M	250 ml PL	1 L TEGON	LEN. LAB NO.
1415	X	50													
1420	X	50													
[Signature]															
RELINQUISHED BY: [Signature] DATE / TIME: 10/23/95 1800 RECEIVED BY: [Signature] DATE / TIME: [Signature]															

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REMARKS

10/23/95 2
Felix # 9778369903

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



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CHAIN OF CUSTODY RECORD

01421

PROJECT NAME		Casswell AFB		JOB NO.		11-3512-3209								
SAMPLERS (SIGNATURE)		[Signature]		SAMPLING DATE		10/23/95								
TIME	8:35	SOURCE CODE	50	SAMPLE STATION DESCRIPTION		OT 39075A								
1455	X													

CONTAINER TYPE	40 ml G VOA HCl	1 L G. AMBER	2.02 G. W/M	1 L G. (H3SO4)	500 ml. AMBER	1 L PL (HNO3)	1 L PL (H2SO4)	1 L PL (HNO3+Ascorbic Acid)	1 L PL (2N Acetic + NaOH)	402 PL W/M	250 ml PL	1 L TEGON	LEML LAB NO.

RELINQUISHED BY	DATE / TIME	RECEIVED BY	DATE / TIME	RECEIVED BY LABORATORY	DATE / TIME
[Signature]	10/23/95	[Signature]		[Signature]	

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REMARKS

By 2 of 2
9118269746

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - NO
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW

#1
11462

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CHAIN OF CUSTODY RECORD

SAMPLING
INFORMATION
NPDES NUMBER

NAME OF FACILITY: Cummins Corp.

STREET ADDRESS: East Wacker, IL

PROJECT NAME

Cummins AFB

JOB NO.

11-3512-2204

SAMPLERS (SIGNATURE)

[Signature]

SAMPLING DATE

10/24/95

TIME

SAMPLE STATION DESCRIPTION

SOURCE CODE

COMP

GRAB

1005 X

50

OT39235A

TOTAL NO OF CONTAINERS

4

CONTAINER TYPE

40 ml G VOA HCl

1.6 - AMBER

2 oz G. W/M

1.6 G (H₂SO₄)

300 ml - AMBER

1.6 PL (HNO₃)

1.6 PL (H₂SO₄)

1.6 PL (NaOH + Ascorbic Acid)

1.6 PL (2% Acetic Acid)

4 oz PL W/M

250 ml PL

1.6 PL (TEION)

LEAD LAB NO.

RELINQUISHED BY

[Signature]

DATE / TIME

10/24/95

RECEIVED BY:

[Signature]

DATE / TIME

RELINQUISHED BY:

[Signature]

DATE / TIME

RECEIVED BY LABORATORY:

[Signature]

DATE / TIME

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REMARKS

Pg. 2 of 2

Feder # 9228420854

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL

NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA



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NATIONAL LABORATORIES
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CHAIN OF CUSTODY RECORD

#2

1423

PROJECT NAME Carruth AFB		JOB NO. 11-3512-3209	
SAMPLERS (SIGNATURE) <i>[Signature]</i>			
SAMPLING DATE 10/24/95			
TIME	SOURCE CODE	SAMPLE STATION DESCRIPTION	TOTAL NO OF CONTAINERS
0730 X	50	FDUP-07	4
0935 X	50	OT3920SA	4
0935 X	50	OT3920SAMS	2
0935 X	50	OT3920SA MSD	2
1030 X	50	OT3926SA	4
1035 X	50	OT3925SA	4
0730 X	50	SLK-0739 FDUP-08	4
0925 X	50	OT3914SA	4
1000 X	50	OT3921SA	4
1015 X	50	OT3924SA	4
0915 X	50	OT3919SA	4

RELINQUISHED BY <i>[Signature]</i>	DATE / TIME 10/24/95 1600	RECEIVED BY <i>[Signature]</i>	DATE / TIME 10/24/95 1600
(SIGNATURE)		(SIGNATURE)	

40 ml G. VOA HCl	2 oz G. W.M.	1 L. G. W.M.	1 L. PL. AMBER	1 L. PL. (H ₂ SO ₄)	1 L. PL. (HNO ₃)	1 L. PL. (NaOH + Ascorbic Acid)	1 L. PL. (2% Acetic + NaOH)	4 oz PL. W.M.	250 ml PL.	1 L. TETON	LEAD LAB NO.
------------------	--------------	--------------	----------------	--	------------------------------	---------------------------------	-----------------------------	---------------	------------	------------	--------------

NAME OF FACILITY Carruth AFB		STREET ADDRESS Fort Liberty, Tex.	
SAMPLING INFORMATION		NPDES NUMBER	

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REMARKS

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA

By 10/24/95

9778420854



ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

#3

01422

SAMPLING
INFORMATION
NPDES NUMBER

NAME OF FACILITY: Caswell AFB
STREET ADDRESS: Fort Worth, TX

PROJECT NAME

Caswell AFB

JOB NO.

11-3517-3209

SAMPLERS (SIGNATURE)

[Signature]

SAMPLING DATE

10/24/95

TOTAL NO OF
CONTAINERS

SAMPLE STATION DESCRIPTION

SOURCE
CODE

TIME

0930 X

D₁

H₂O

AM BL-2

3 3

1520 X

D₁

H₂O

TB-102495

2 2

1445 X

D₁

H₂O

EQB-3

8 3 4

1430 X

MW

Purge H₂O

6 3 2

CONTAINER TYPE

40 ml G VOA HCl

1 LG - AMBER

202 G W/M

1 LG (H₂SO₄)

500 ml - AMBER

1 LG (HNO₃)

1 LG (HNO₃)

1 LG (HNO₃)

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10/24/95 1600

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REMARKS

LL PL HNO₃ ARE NOT to pH 2

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*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW
NON-AQUEOUS - NA

TAB

Appendix B

APPENDIX B**MS/MSD RESULTS****B-1 AEROSPACE MUSEUM SITE****B-2 GROUNDS MAINTENANCE YARD**

APPENDIX B-1**AEROSPACE MUSEUM SITE****Sample Identification**

OT3815SA MS
OT3815SA MSD

OT3840SA MS
OT3840SA MSD

OT3820SA MS
OT3820SA MSD

OT3850SA MS
OT3850SA MSD

OT3822SA MS
OT3822SA MSD

FDUP-04 MS
FDUP-04 MSD

OT3830SA MS
OT3830SA MSD

3 - 6010

METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 55C81067

Matrix Spike - Lab ID No.: OT3815SA/AA81074

Level: (low/med) LOW

OT3815SAMS/AA81075	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	41.5	0.00	4.97	12 *	75 - 125
Barium	166	139	269	79	75 - 125
Beryllium	4.15	0.00	4.15	100	75 - 125
Cadmium	4.15	0.00	1.66	40 *	75 - 125
Calcium					
Chromium	16.6	19.7	33.2	81	75 - 125
Cobalt	41.5	4.12	44.8	98	75 - 125
Copper	20.7	11.2	25.7	70 *	75 - 125
Iron					
Magnesium					
Manganese	41.5	631	466	(397) *	75 - 125
Molybdenum	41.5	0.00	34.3	83	75 - 125
Nickel	41.5	229	261	78	75 - 125
Potassium					
Silver	8.29	0.00	8.54	103	75 - 125
Sodium					
Thallium	166	0.00	160	97	75 - 125
Vanadium	41.5	23.7	57.2	81	75 - 125
Zinc	41.5	79.5	122	102	75 - 125

Spike Recovery: 4 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 55C81067

Matrix Spike - Lab ID No.: OT3815SA/AA81074

Level: (low/med) LOW

OT3815SAMS/AA81074	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC.	% # RPD	% # RPD	QC LIMITS REC.
COMPOUND						
Aluminum						
Antimony	40.7	5.29	13	*	8 20	75 - 125
Barium	163	268	79		1 20	75 - 125
Beryllium	4.07	4.07	100		0 20	75 - 125
Cadmium	4.07	1.95	48	*	18 20	75 - 125
Calcium						
Chromium	16.3	26.0	39	*	70 * 20	75 - 125
Cobalt	40.7	43.5	97		1 20	75 - 125
Copper	20.4	27.7	81		15 20	75 - 125
Iron						
Magnesium						
Manganese	40.7	462	(415)	*	(4) 20	75 - 125
Molybdenum	40.7	35.1	86		4 20	75 - 125
Nickel	40.7	256	67	*	15 20	75 - 125
Potassium						
Silver	8.1	8.47	104		1 20	75 - 125
Sodium						
Thallium	163	154	95		2 20	75 - 125
Vanadium	40.7	56.7	81		0 20	75 - 125
Zinc	40.7	118	94		8 20	75 - 125

Spike Recovery: 5 out of 20 outside limits.

RPD: 1 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium

Calcium Potassium

Iron Sodium

ism3094

3 - 6010

METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3820SA/AA81058

Level: (low/med) LOW

OT3820SAMS/AA81059	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	38.9	1.95	5.44	9 *	75 - 125
Barium	155	119	267	95	75 - 125
Beryllium	3.89	0.799	4.58	97	75 - 125
Cadmium	3.89	0.00	1.48	38 *	75 - 125
Calcium					
Chromium	15.5	13.9	27.0	85	75 - 125
Cobalt	38.9	4.35	42.1	97	75 - 125
Copper	19.4	8.61	26.0	90	75 - 125
Iron					
Magnesium					
Manganese	38.9	329	349	51 *	75 - 125
Molybdenum	38.9	1.60	27.5	67 *	75 - 125
Nickel	38.9	9.15	45.8	94	75 - 125
Potassium					
Silver	7.77	0.00	7.69	99	75 - 125
Sodium					
Thallium	155	0.00	148	95	75 - 125
Vanadium	38.9	21.8	56.5	89	75 - 125
Zinc	38.9	27.8	64.5	94	75 - 125

Spike Recovery: 4 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3820SA/AA81058

Level: (low/med) LOW

OT3820SAMSD/AA81058	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC.	% # RPD	QC LIMITS REC.
COMPOUND				# RPD	
Aluminum					
Antimony	43.0	8.07	14	* 45 * 20	75 - 125
Barium	172	274	90	6 20	75 - 125
Beryllium	4.30	4.81	93	4 20	75 - 125
Cadmium	4.30	1.46	34	* 11 20	75 - 125
Calcium					
Chromium	17.2	29.4	90	6 20	75 - 125
Cobalt	43.0	44.2	93	5 20	75 - 125
Copper	21.5	27.0	85	5 20	75 - 125
Iron					
Magnesium					
Manganese	43.0	362	78	41 * 20	75 - 1
Molybdenum	43.0	31.7	70	* 5 20	75 - 1
Nickel	43.0	47.8	90	5 20	75 - 125
Potassium					
Silver	8.6	8.16	95	4 20	75 - 125
Sodium					
Thallium	172	158	92	3 20	75 - 125
Vanadium	43.0	59.4	88	2 20	75 - 125
Zinc	43.0	71.6	102	8 20	75 - 125

Spike Recovery: 3 out of 20 outside limits.

RPD: 2 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

ism3093B

3 - 6010

**METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 53C81027

Matrix Spike - Lab ID No.: OT3822SA/AA81027

Level: (low/med) Low

OT3822SAMS/AA83096	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS %	QC LIMITS
COMPOUND	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	45.1	0.00	6.94	15 *	75 - 125
Barium	180	148	316	93	75 - 125
Beryllium	4.51	0.964	5.23	95	75 - 125
Cadmium	4.51	0.00	2.43	54 *	75 - 125
Calcium					
Chromium	18.0	22.1	34.1	67 *	75 - 125
Cobalt	45.1	5.60	49.9	98	75 - 125
Copper	22.5	13.2	34.4	94	75 - 125
Iron					
Magnesium					
Manganese	45.1	678	825	327 *	75 - 125
Molybdenum	45.1	2.19	31.2	64 *	75 - 125
Nickel	45.1	12.4	55.9	96	75 - 125
Potassium					
Silver	9.01	0.613	9.01	93	75 - 125
Sodium					
Thallium	180	0.00	175	97	75 - 125
Vanadium	45.1	18.8	63.3	99	75 - 125
Zinc	45.1	35.0	66.8	70 *	75 - 125

Spike Recovery: 6 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

000095A1

3 - 6010

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 53C81027

Matrix Spike - Lab ID No.: OT3822SA/AA81027

Level: (low/med) Low

OT3822SAMSD/AA83097	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC.	% # RPD	% # RPD	QC LIMITS REC.
COMPOUND						
Aluminum						
Antimony	46.1	5.25	11	* 30	* 20	75 - 125
Barium	184	327	97	4	20	75 - 125
Beryllium	4.61	5.62	101	7	20	75 - 125
Cadmium	4.61	2.49	54	* 0	20	75 - 125
Calcium						
Chromium	18.4	39.2	93	33	* 20	75 - 125
Cobalt	46.1	52.7	102	4	20	75 - 125
Copper	23.0	36.1	99	5	20	75 - 125
Iron						
Magnesium						
Manganese	46.1	742	140	* 80	* 20	75 -
Molybdenum	46.1	29.5	59	* 8	20	75 - 125
Nickel	46.1	60.4	104	8	20	75 - 125
Potassium						
Silver	9.2	9.49	96	3	20	75 - 125
Sodium						
Thallium	184	187	102	5	20	75 - 125
Vanadium	46.1	64.8	100	1	20	75 - 125
Zinc	46.1	77.5	92	27	* 20	75 - 125

Spike Recovery: 4 out of 20 outside limits.

RPD: 4 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium

Calcium Potassium

Iron Sodium

ism3083

3 - 6010

METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3830SA/AA81047

Level: (low/med) LOW

OT3830SAMS/AA81048	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	44.6	0.00	5.44	12 *	75 - 125
Barium	178	107	278	96	75 - 125
Beryllium	4.46	0.793	4.90	92	75 - 125
Cadmium	4.46	0.00	1.78	40 *	75 - 125
Calcium					
Chromium	17.8	13.0	28.9	89	75 - 125
Cobalt	44.6	3.52	45.0	93	75 - 125
Copper	22.3	9.16	28.9	88	75 - 125
Iron					
Magnesium					
Manganese	44.6	296	341	101	75 - 125
Molybdenum	44.6	1.32	31.6	68 *	75 - 125
Nickel	44.6	9.34	49.1	89	75 - 125
Potassium					
Silver	8.91	0.00	8.82	99	75 - 125
Sodium					
Thallium	178	0.00	166	93	75 - 125
Vanadium	44.6	17.1	56.8	89	75 - 125
Zinc	44.6	24.0	63.0	88	75 - 125

Spike Recovery: 3 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

3 - 6010

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3830SA/AA81047

Level: (low/med) LOW

OT3830SAMS/AA81049	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC.	% # RPD	% # RPD	QC LIMITS REC.
COMPOUND						
Aluminum						
Antimony	43.6	5.49	13	*	3 20	75 - 125
Barium	174	260	88		9 20	75 - 125
Beryllium	4.36	4.53	86		7 20	75 - 125
Cadmium	4.36	1.39	32	*	22 * 20	75 - 125
Calcium						
Chromium	17.4	28.2	87		2 20	75 - 125
Cobalt	43.6	41.5	87		6 20	75 - 125
Copper	21.8	27.0	82		8 20	75 - 125
Iron						
Magnesium						
Manganese	43.6	325	68	*	39 * 20	75 - 1
Molybdenum	43.6	27.6	60	*	12 20	75 - 125
Nickel	43.6	46.3	85		5 20	75 - 125
Potassium						
Silver	8.7	8.19	94		5 20	75 - 125
Sodium						
Thallium	174	157	90		3 20	75 - 125
Vanadium	43.6	52.1	80		10 20	75 - 125
Zinc	43.6	62.5	89		1 20	75 - 125

Spike Recovery: 4 out of 20 outside limits.

RPD: 2 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

ism3093

3 - 6010

METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 52C81007

Matrix Spike - Lab ID No.: OT3840SA/AA81021

Level: (low/med) LOW

OT3840SAMS/AA81022	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	41.2	1.98	5.77	9 *	75 - 125
Barium	165	74.1	272	120	75 - 125
Beryllium	41.2	0.00	6.58	160 *	75 - 125
Cadmium	41.2	0.00	1.98	48 *	75 - 125
Calcium					
Chromium	16.5	14.8	33.7	115	75 - 125
Cobalt	41.2	2.14	44.3	102	75 - 125
Copper	20.6	14.8	37.0	108	75 - 125
Iron					
Magnesium					
Manganese	41.2	476	501	62 *	75 - 125
Molybdenum	41.2	4.03	33.2	71 *	75 - 125
Nickel	41.2	222	268	110	75 - 125
Potassium					
Silver	8.23	0.00	8.81	107	75 - 125
Sodium					
Thallium	165	0.00	156	95	75 - 125
Vanadium	41.2	10.4	53.6	105	75 - 125
Zinc	41.2	106	154	117	75 - 125

Spike Recovery: 5 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

3 - 6010

**METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 52C81007

Matrix Spike - Lab ID No.: OT3840SA/AA81021

Level: (low/med) LOW

OT3840SAMSD/AA81023	SPIKE	MSD	MSD			QC
COMPOUND	ADDED	CONCENTRATION	%	%		LIMITS
	(mg/Kg)	(mg/Kg)	REC.	# RPD	# RPD	REC.
Aluminum						
Antimony	47.4	5.87	8	*	11	20
Barium	189	255	95		23	* 20
Beryllium	4.74	6.02	127	*	23	* 20
Cadmium	4.74	1.58	33	*	36	* 20
Calcium						
Chromium	18.9	34.6	105		9	20
Cobalt	47.4	40.4	81		24	* 20
Copper	23.7	33.9	81		29	* 20
Iron						
Magnesium						
Manganese	47.4	504	59	*	5	20
Molybdenum	47.4	28.5	52	*	32	* 20
Nickel	47.4	240	37	*	100	* 20
Potassium						
Silver	9.5	7.68	81		28	* 20
Sodium						
Thallium	189	138	73	*	26	* 20
Vanadium	47.4	52.1	88		17	20
Zinc	47.4	139	69	*	51	* 20

Spike Recovery: 8 out of 20 outside limits.

RPD: 10 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

ism3082A

3 - 6010

**METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3850SA/AA81053

Level: (low/med) LOW

OT3850SAMS/AA81054	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	42.9	1.99	7.21	12 *	75 - 125
Barium	172	57.2	249	112	75 - 125
Beryllium	4.29	0.00	4.29	100	75 - 125
Cadmium	4.29	0.00	1.89	44 *	75 - 125
Calcium					
Chromium	17.2	0.00	19.7	115	75 - 125
Cobalt	42.9	2.17	42.0	93	75 - 125
Copper	21.5	6.07	25.7	92	75 - 125
Iron					
Magnesium					
Manganese	42.9	346	406	140 *	75 - 125
Molybdenum	42.9	1.91	33.8	74 *	75 - 125
Nickel	42.9	230	266	84	75 - 125
Potassium					
Silver	8.58	0.00	8.41	98	75 - 125
Sodium					
Thallium	172	0.00	161	94	75 - 125
Vanadium	42.9	14.5	52.9	90	75 - 125
Zinc	42.9	110	155	105	75 - 125

Spike Recovery: 4 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

3 - 6010

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 54C81047

Matrix Spike - Lab ID No.: OT3850SA/AA81053

Level: (low/med) LOW

OT3850SAMS/AA81055	SPIKE	MSD	MSD	% RPD		QC
COMPOUND	ADDED	CONCENTRATION	%	#	#	LIMITS
	(mg/Kg)	(mg/Kg)	REC.		RPD	REC.
Aluminum						
Antimony	41.3	7.35	13	*	7	20
Barium	165	259	122		9	20
Beryllium	4.13	4.13	100		0	20
Cadmium	4.13	1.82	44	*	0	20
Calcium						
Chromium	16.5	20.6	125		8	20
Cobalt	41.3	42.0	97		4	20
Copper	20.7	28.9	111		19	20
Iron						
Magnesium						
Manganese	41.3	481	326	*	80	* 20
Molybdenum	41.3	34.1	78		5	20
Nickel	41.3	259	69	*	19	20
Potassium						
Silver	8.3	8.51	103		5	20
Sodium						
Thallium	165	158	95		2	20
Vanadium	41.3	51.9	91		1	20
Zinc	41.3	151	100		5	20

Spike Recovery: 4 out of 20 outside limits.

RPD: 1 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

ism3093A

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MSD : SW7421	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
initial	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81013	MS Analysis : 12:19	MSD Analysis : 12:24

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	5.56	4.409	11.7	114	4.664	12	114	0	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
initial	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 11/27/95	MSD Analysis : 11/27/95
Neat Sample : AA81013	MS Analysis : 20:20	MSD Analysis : 20:25

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Selenium	0	4.409	1.03	23	4.664	1.29	28	17	75	125	20	PR

MSD : SW7060	MS Sample Name : OT3840SAMS	MSD Sample Name : OT3840SAMSD
initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 11/28/95	MSD Analysis : 11/28/95
Neat Sample : AA81021	MS Analysis : 05:15	MSD Analysis : 05:20

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Arsenic	2.87	4.241	5.92	72	4.163	5.83	71	1	75	125	20	PR

MSD : SW7421	MS Sample Name : OT3840SAMS	MSD Sample Name : OT3840SAMSD
initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81021	MS Analysis : 01:30	MSD Analysis : 01:42

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	1.030	4.241	0	430	4.163	0	2470	2	75	125	20	PR

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MSD : SW7740	MS Sample Name : OT3840SAMSD	MSD Sample Name : OT3840SAMSD
initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 11/28/95	MSD Analysis : 11/28/95
Neat Sample : AA81021	MS Analysis : 13:23	MSD Analysis : 13:58

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Selenium	0	4.241	0.717	17	*	4.163	1.09	26	*	43	*	75	125	20	PR

LCS : SW7060	Sample Name : FSL3084
initial	LIMS Sample ID : AA81462
Extraction Method : SW3050	Date of Extraction : 11/8/95
Matrix : SQ	Time of Extraction : 08:00
Units : mg/Kg	Date of Analysis : 11/28/95
	Time of Analysis : 00:12

Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Arsenic	5	4.82	96		80	120	PR

LCS : SW7421	Sample Name : FSL3084
initial	LIMS Sample ID : AA81462
Extraction Method : SW3050	Date of Extraction : 11/8/95
Matrix : SQ	Time of Extraction : 08:00
Units : mg/Kg	Date of Analysis : 11/30/95
	Time of Analysis : 18:06

Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Lead	5	5.15	103		80	120	PR

LCS : SW7740	Sample Name : FSL3084
initial	LIMS Sample ID : AA81462
Extraction Method : SW3050	Date of Extraction : 11/8/95
Matrix : SQ	Time of Extraction : 08:00
Units : mg/Kg	Date of Analysis : 11/27/95
	Time of Analysis : 18:25

Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Selenium	5	5.41	108		80	120	PR

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0001

MSD : SW7421	MS Sample Name : OT3815SAMS	MSD Sample Name : OT3815SAMSD
initial	MS LIMS ID : AA81075	MSD LIMS ID : AA81076
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 13:00	MSD Extraction : 13:00
Units : mg/Kg	MS Analysis : 11/15/95	MSD Analysis : 11/15/95
Neat Sample : AA81074	MS Analysis : 23:03	MSD Analysis : 23:14

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Lead	15.4	4.03	19	89	4.161	19.4	96	7	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3815SAMS	MSD Sample Name : OT3815SAMSD
initial	MS LIMS ID : AA81075	MSD LIMS ID : AA81076
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 13:00	MSD Extraction : 13:00
Units : mg/Kg	MS Analysis : 11/13/95	MSD Analysis : 11/13/95
Neat Sample : AA81074	MS Analysis : 14:21	MSD Analysis : 14:26

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Selenium	0	4.03	0.496	12	4.161	0.471	11	8	75	125	20	PR

LCS : SW7060	Sample Name : FSL3081
initial	LIMS Sample ID : AA81428
Extraction Method : SW3050	Date of Extraction : 11/7/95
Matrix : SQ	Time of Extraction : 13:00
Units : mg/Kg	Date of Analysis : 11/10/95
	Time of Analysis : 15:26

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Arsenic	5	5.12	102	80	120	PR

LCS : SW7421	Sample Name : FSL3081
initial	LIMS Sample ID : AA81428
Extraction Method : SW3050	Date of Extraction : 11/7/95
Matrix : SQ	Time of Extraction : 13:00
Units : mg/Kg	Date of Analysis : 11/15/95
	Time of Analysis : 20:07

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Lead	5	5.3	106	80	120	PR

**Law Engineering and Environmental Services, Inc.
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Lab Batch ID : FSB3085

Project Name : CARSWELL SOIL
Project Number : 11-3517
SDG Number : 53C81027

Concentration Level : LOW
Batch Prep Date : 11/11/95
SDGs Included : 53C81027

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3822SA	AA81027	10/22/95	SO	N
OT3902SA	AA81028	10/23/95	SO	N
OT3903SA	AA81029	10/23/95	SO	N
OT3823SA	AA81030	10/22/95	SO	N
OT3826SA	AA81031	10/22/95	SO	N
OT3821SA	AA81032	10/22/95	SO	N
OT3841SA	AA81033	10/22/95	SO	N
FDUP-04	AA81034	10/22/95	SO	FD
OT3835SA	AA81035	10/22/95	SO	N
OT3833SA	AA81036	10/22/95	SO	N
OT3847SA	AA81037	10/22/95	SO	N
OT3834SA	AA81038	10/22/95	SO	N
OT3846SA	AA81039	10/22/95	SO	N
OT3848SA	AA81040	10/22/95	SO	N
OT3836SA	AA81041	10/22/95	SO	N
OT3843SA	AA81042	10/22/95	SO	N
OT3828SA	AA81043	10/22/95	SO	N
FDUP-05	AA81044	10/22/95	SO	FD
FDUP-03	AA81045	10/22/95	SO	FD
OT3829SA	AA81046	10/22/95	SO	N
FSB3085	AA81905	11/11/95	SQ	LB
FSL3085	AA81906	11/11/95	SQ	BS
OT3822SAMS	AA83096	10/22/95	SQ	MS
OT3822SAMSD	AA83097	10/22/95	SQ	SD

MSD : SW7060

MS Sample Name : OT3822SAMS

MSD Sample Name : OT3822SAMSD

initial

MS LIMS ID : AA83096

MSD LIMS ID : AA83097

Extraction : SW3050

MS Extraction : 11/11/95

MSD Extraction : 11/11/95

Matrix : SQ

MS Extraction : 09:00

MSD Extraction : 09:00

Units : mg/Kg

MS Analysis : 11/20/95

MSD Analysis : 11/20/95

Net Sample : AA81027

MS Analysis : 23:18

MSD Analysis : 23:22

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Arsenic	1.44	4.641	4.5	66	4.347	4.32	66	1	75	125	20	PR

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MSD : SW7421	MS Sample Name : OT3822SAMS	MSD Sample Name : OT3822SAMSD
initial	MS LIMS ID : AA83096	MSD LIMS ID : AA83097
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SQ	MS Extraction : 09:00	MSD Extraction : 09:00
Units : mg/Kg	MS Analysis : 11/30/95	MSD Analysis : 11/30/95
Neat Sample : AA81027	MS Analysis : 10:37	MSD Analysis : 11:16

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Lead	36.2	4.641	36.6	9	*	4.347	37.2	23	*	91	*	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3822SAMS	MSD Sample Name : OT3822SAMSD
initial	MS LIMS ID : AA83096	MSD LIMS ID : AA83097
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SQ	MS Extraction : 09:00	MSD Extraction : 09:00
Units : mg/Kg	MS Analysis : 11/22/95	MSD Analysis : 11/22/95
Neat Sample : AA81027	MS Analysis : 23:35	MSD Analysis : 23:40

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Selenium	0	4.641	1.22	26	*	4.347	1.12	26	*	2	*	75	125	20	PR

LCS : SW7080	Sample Name : FSL3085
initial	LIMS Sample ID : AA81906
Extraction Method : SW3050	Date of Extraction : 11/11/95
Matrix : SQ	Time of Extraction : 09:00
Units : mg/Kg	Date of Analysis : 11/20/95
	Time of Analysis : 22:39

Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Arsenic	5	4.52	90		80	120	PR

LCS : SW7421	Sample Name : FSL3085
initial	LIMS Sample ID : AA81906
Extraction Method : SW3050	Date of Extraction : 11/11/95
Matrix : SQ	Time of Extraction : 09:00
Units : mg/Kg	Date of Analysis : 11/20/95
	Time of Analysis : 10:12

Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Lead	5	5.18	104		80	120	PR

**Law Engineering and Environmental Services, Inc.
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Law Batch ID : FSB3078

Project Name : CARSWELL SOIL
Project Number : 11-3517
SDG Number : 54C81047

Concentration Level : LOW
Batch Prep Date : 11/7/95
SDGs Included : 54C81047

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3830SA	AA81047	10/22/95	SO	N
OT3830SAMS	AA81048	10/22/95	SO	MS
OT3830SAMSD	AA81049	10/22/95	SO	SD
OT3839SA	AA81050	10/22/95	SO	N
OT3849SA	AA81051	10/22/95	SO	N
OT3837SA	AA81052	10/22/95	SO	N
OT3850SA	AA81053	10/23/95	SO	N
OT3850SAMS	AA81054	10/23/95	SO	MS
OT3850SAMSD	AA81055	10/23/95	SO	SD
OT3838SA	AA81056	10/22/95	SO	N
OT3831SA	AA81057	10/22/95	SO	N
OT3820SA	AA81058	10/22/95	SO	N
OT3820SAMS	AA81059	10/22/95	SO	MS
OT3820SAMSD	AA81060	10/22/95	SO	SD
OT3819SA	AA81061	10/22/95	SO	N
OT3801SA	AA81062	10/22/95	SO	N
OT3818SA	AA81063	10/22/95	SO	N
OT3817SA	AA81064	10/22/95	SO	N
OT3808SA	AA81065	10/22/95	SO	N
OT3804SA	AA81066	10/22/95	SO	N
FSB3078	AA81425	11/7/95	SQ	LB
FSL3078	AA81426	11/7/95	SQ	BS

MSD : SW7060 initial	MS Sample Name : OT3830SAMS MS LIMS ID : AA81048	MSD Sample Name : OT3830SAMSD MSD LIMS ID : AA81049
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/8/95	MSD Analysis : 11/8/95
Neat Sample : AA81047	MS Analysis : 14:39	MSD Analysis : 14:44

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Arsenic	1.56	4.49	4.59	68	4.105	4.32	67	0	75	125	20	PR

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MSD : SW7421	MS Sample Name : OT3830SAMS	MSD Sample Name : OT3830SAMSD
initial	MS LIMS ID : AA81048	MSD LIMS ID : AA81049
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/12/95	MSD Analysis : 11/13/95
Neat Sample : AA81047	MS Analysis : 23:53	MSD Analysis : 00:04

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	16	4.49	25.6	214	4.105	19.5	85	86	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3830SAMS	MSD Sample Name : OT3830SAMSD
initial	MS LIMS ID : AA81048	MSD LIMS ID : AA81049
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/8/95	MSD Analysis : 11/8/95
Neat Sample : AA81047	MS Analysis : 21:50	MSD Analysis : 21:55

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Selenium	0.143	4.49	2.14	45	4.105	1.73	39	14	75	125	20	PR

MSD : SW7060	MS Sample Name : OT3850SAMS	MSD Sample Name : OT3850SAMSD
initial	MS LIMS ID : AA81054	MSD LIMS ID : AA81055
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/8/95	MSD Analysis : 11/8/95
Neat Sample : AA81053	MS Analysis : 15:51	MSD Analysis : 15:56

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Arsenic	2.31	4.224	5.66	79	4.131	5.33	73	8	75	125	20	PR

MSD : SW7421	MS Sample Name : OT3850SAMS	MSD Sample Name : OT3850SAMSD
initial	MS LIMS ID : AA81054	MSD LIMS ID : AA81055
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/15/95	MSD Analysis : 11/15/95
Neat Sample : AA81053	MS Analysis : 11:20	MSD Analysis : 11:25

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	52.3	4.224	73.3	497	4.131	71.6	467	6	75	125	20	PR

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National Laboratories - Pensacola**

MSD : SW7740	MS Sample Name : OT3850SAMS	MSD Sample Name : OT3850SAMSD
initial	MS LIMS ID : AA81054	MSD LIMS ID : AA81055
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/8/95	MSD Analysis : 11/8/95
Neat Sample : AA81053	MS Analysis : 23:05	MSD Analysis : 23:10

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Selenium	0	4.224	1.78	42	*	4.131	1.5	36	*	15	*	75	125	20	PR

MSD : SW7060	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/8/95	MSD Analysis : 11/8/95
Neat Sample : AA81058	MS Analysis : 16:52	MSD Analysis : 16:57

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Arsenic	2.21	3.857	4.8	67	*	4.423	4.94	62	*	8	*	75	125	20	PR

MSD : SW7421	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/13/95	MSD Analysis : 11/13/95
Neat Sample : AA81058	MS Analysis : 03:38	MSD Analysis : 03:49

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Lead	27.7	3.857	33.9	161	*	4.423	37.7	226	*	34	*	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : SW3050	MS Extraction : 11/7/95	MSD Extraction : 11/7/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/9/95	MSD Analysis : 11/9/95
Neat Sample : AA81058	MS Analysis : 00:08	MSD Analysis : 00:12

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Selenium	0	3.857	1.36	35	*	4.423	1.55	35	*	1	*	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

0002

Law Batch ID : HGSB0491

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/5/95

SDG Number : 55C81067

SDGs Included : 55C81067

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3851SA	AA81067	10/23/95	SO	N
OT3803SA	AA81068	10/22/95	SO	N
OT3802SA	AA81069	10/22/95	SO	N
OT3805SA	AA81070	10/22/95	SO	N
OT3807SA	AA81071	10/22/95	SO	N
OT3806SA	AA81072	10/22/95	SO	N
OT3811SA	AA81073	10/22/95	SO	N
OT3815SA	AA81074	10/22/95	SO	N
OT3815SAMS	AA81075	10/22/95	SO	MS
OT3815SAMSD	AA81076	10/22/95	SO	SD
OT3812SA	AA81077	10/22/95	SO	N
OT3816SA	AA81078	10/22/95	SO	N
OT3907SA	AA81079	10/23/95	SO	N
OT3814SA	AA81080	10/22/95	SO	N
OT3813SA	AA81081	10/22/95	SO	N
OT3810SA	AA81082	10/22/95	SO	N
FDUP-01	AA81083	10/22/95	SO	FD
OT3809SA	AA81084	10/22/95	SO	N
OT3904SA	AA81085	10/23/95	SO	N
OT3901SA	AA81086	10/23/95	SO	N
HGSB0491	AA81473	11/5/95	SQ	LB
HGSL0491	AA81474	11/5/95	SQ	BS

MSD : SW7471

MS Sample Name : OT3815SAMS

MSD Sample Name : OT3815SAMSD

initial

MS LIMS ID : AA81075

MSD LIMS ID : AA81076

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/5/95

MSD Analysis : 11/5/95

Neat Sample : AA81074

MS Analysis : 15:37

MSD Analysis : 15:39

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Mercury	0	0.555	0.585	105	0.524	0.505	96	9	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

000230

Law Batch ID : HGSB0492

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/5/95

SDG Number : 53C81027

SDGs Included : 53C81027

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3822SA	AA81027	10/22/95	SO	N
OT3902SA	AA81028	10/23/95	SO	N
OT3903SA	AA81029	10/23/95	SO	N
OT3823SA	AA81030	10/22/95	SO	N
OT3826SA	AA81031	10/22/95	SO	N
OT3821SA	AA81032	10/22/95	SO	N
OT3841SA	AA81033	10/22/95	SO	N
FDUP-04	AA81034	10/22/95	SO	FD
OT3835SA	AA81035	10/22/95	SO	N
OT3833SA	AA81036	10/22/95	SO	N
OT3847SA	AA81037	10/22/95	SO	N
OT3834SA	AA81038	10/22/95	SO	N
OT3846SA	AA81039	10/22/95	SO	N
OT3848SA	AA81040	10/22/95	SO	N
OT3836SA	AA81041	10/22/95	SO	N
OT3843SA	AA81042	10/22/95	SO	N
OT3828SA	AA81043	10/22/95	SO	N
FDUP-05	AA81044	10/22/95	SO	FD
FDUP-03	AA81045	10/22/95	SO	FD
OT3829SA	AA81046	10/22/95	SO	N
HGSB0492	AA81465	11/5/95	SQ	LB
HGSL0492	AA81466	11/5/95	SQ	BS
OT3822SAMS	AA83096	10/22/95	SQ	MS
OT3822SAMSD	AA83097	10/22/95	SQ	SD

MSD : SW7471

MS Sample Name : OT3822SAMS

MSD Sample Name : OT3822SAMSD

initial

MS LIMS ID : AA83096

MSD LIMS ID : AA83097

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SQ

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/5/95

MSD Analysis : 11/5/95

Net Sample : AA81027

MS Analysis : 13:52

MSD Analysis : 13:54

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Mercury	0	0.535	0.489	92	0.585	0.528	90	1	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HGSB0490

Project Name : CARSWELL SOIL
Project Number : 11-3517
SDG Number : 54C81047

Concentration Level : LOW

Batch Prep Date : 11/5/95

SDGs Included : 54C81047

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3830SA	AA81047	10/22/95	SO	N
OT3830SAMS	AA81048	10/22/95	SO	MS
OT3830SAMSD	AA81049	10/22/95	SO	SD
OT3839SA	AA81050	10/22/95	SO	N
OT3849SA	AA81051	10/22/95	SO	N
OT3837SA	AA81052	10/22/95	SO	N
OT3850SA	AA81053	10/23/95	SO	N
OT3850SAMS	AA81054	10/23/95	SO	MS
OT3850SAMSD	AA81055	10/23/95	SO	SD
OT3838SA	AA81056	10/22/95	SO	N
OT3831SA	AA81057	10/22/95	SO	N
OT3820SA	AA81058	10/22/95	SO	N
OT3820SAMS	AA81059	10/22/95	SO	MS
OT3820SAMSD	AA81060	10/22/95	SO	SD
OT3819SA	AA81061	10/22/95	SO	N
OT3801SA	AA81062	10/22/95	SO	N
OT3818SA	AA81063	10/22/95	SO	N
OT3817SA	AA81064	10/22/95	SO	N
OT3808SA	AA81065	10/22/95	SO	N
OT3804SA	AA81066	10/22/95	SO	N
HGSB0490	AA81469	11/5/95	SQ	LB
HGSL0490	AA81470	11/5/95	SQ	BS

MSD : SW7471

MS Sample Name : OT3830SAMS

MSD Sample Name : OT3830SAMSD

initial

MS LIMS ID : AA81048

MSD LIMS ID : AA81049

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/5/95

MSD Analysis : 11/5/95

Neat Sample : AA81047

MS Analysis : 17:22

MSD Analysis : 17:24

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Mercury	0	0.538	0.477	89	0.512	0.44	86	3	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
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MSD : SW7471 initial Extraction : NONE Matrix : SO Units : mg/Kg Neat Sample : AA81021	MS Sample Name : OT3840SAMS MS LIMS ID : AA81022 MS Extraction : MS Extraction : MS Analysis : 11/3/95 MS Analysis : 14:09	MSD Sample Name : OT3840SAMSD MSD LIMS ID : AA81023 MSD Extraction : MSD Extraction : MSD Analysis : 11/3/95 MSD Analysis : 14:11
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Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Mercury	0	0.478	0.51	107		0.514	0.548	107		0		75	125	20	PR

LCS : SW7471 initial Extraction Method : NONE Matrix : SQ Units : mg/Kg	Sample Name : HGSL0488 LIMS Sample ID : AA81458 Date of Extraction : Time of Extraction : Date of Analysis : 11/3/95 Time of Analysis : 13:33
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Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Mercury	0.48	0.463	96		80	120	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW7471	MS Sample Name : OT3850SAMS	MSD Sample Name : OT3850SAMSD
initial	MS LIMS ID : AA81054	MSD LIMS ID : AA81055
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 11/5/95	MSD Analysis : 11/5/95
Neat Sample : AA81053	MS Analysis : 17:34	MSD Analysis : 17:40

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Mercury	0	0.501	0.444	89	0.477	0.41	86	3	75	125	20	PR

MSD : SW7471	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 11/5/95	MSD Analysis : 11/5/95
Neat Sample : AA81058	MS Analysis : 17:48	MSD Analysis : 17:50

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Mercury	0	0.458	0.388	85	0.55	0.472	86	1	75	125	20	PR

LCS : SW7471	Sample Name : HGSL0490
initial	LIMS Sample ID : AA81470
Extraction Method : NONE	Date of Extraction :
Matrix : SQ	Time of Extraction :
Units : mg/Kg	Date of Analysis : 11/5/95
	Time of Analysis : 17:18

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Mercury	0.42	0.426	101	80	120	PR

**Law Engineering and Environmental Services, Inc.
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MSD : SW8240	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
Initial	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 10/30/95	MSD Analysis : 10/30/95
Neat Sample : AA81013	MS Analysis : 09:08	MSD Analysis : 09:38

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.061	0.0633	104	0.0605	0.0588	97	7	69	127	40	PR
1,1-Dichloroethane	0	0.061	0.0647	106	0.0605	0.058	96	10	69	122	40	PR
Benzene	0	0.061	0.0633	104	0.0605	0.0595	98	6	68	124	40	PR
Chlorobenzene	0	0.061	0.0594	97	0.0605	0.0572	95	3	73	127	40	PR
Chloroform	0	0.061	0.0623	102	0.0605	0.0584	97	6	63	117	40	PR
Dibromochloromethane	0	0.061	0.0561	92	0.0605	0.0545	90	2	64	120	40	PR
Ethylbenzene	0	0.061	0.0629	103	0.0605	0.0596	99	4	72	125	40	PR
Tetrachloroethene	0	0.061	0.0539	88	0.0605	0.0502	83	6	66	116	40	PR
Toluene	0.0125	0.061	0.0825	115	0.0605	0.0624	82	33	73	122	40	PR
Trichloroethene	0	0.061	0.0625	102	0.0605	0.0591	98	4	76	117	40	PR

MSD : SW8240	MS Sample Name : OT3840SAMS	MSD Sample Name : OT3840SAMSD
Initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 10/30/95	MSD Analysis : 10/30/95
Neat Sample : AA81021	MS Analysis : 10:03	MSD Analysis : 10:30

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0557	0.0496	89	0.0552	0.0471	85	4	69	127	40	PR
1,1-Dichloroethane	0	0.0557	0.0548	98	0.0552	0.0508	92	7	69	122	40	PR
Benzene	0	0.0557	0.0534	96	0.0552	0.0505	92	5	68	124	40	PR
Chlorobenzene	0	0.0557	0.0537	97	0.0552	0.0504	91	6	73	127	40	PR
Chloroform	0	0.0557	0.0533	96	0.0552	0.0512	93	3	63	117	40	PR
Dibromochloromethane	0	0.0557	0.0469	84	0.0552	0.0465	84	0	64	120	40	PR
Ethylbenzene	0	0.0557	0.0516	93	0.0552	0.0494	90	4	72	125	40	PR
Tetrachloroethene	0	0.0557	0.0349	63	0.0552	0.0312	57	10	66	116	40	PR
Toluene	0.00125	0.0557	0.0522	92	0.0552	0.0627	111	19	73	122	40	PR
Trichloroethane	0	0.0557	0.0509	91	0.0552	0.0483	88	4	76	117	40	PR

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MSD : SW8240	MS Sample Name : OT3815SAMS	MSD Sample Name : OT3815SAMS
initial	MS LIMS ID : AA81075	MSD LIMS ID : AA81076
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 10/29/95	MSD Analysis : 10/29/95
Net Sample : AA81074	MS Analysis : 10:04	MSD Analysis : 10:31

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0561	0.0551	98	0.056	0.0516	92	7	69	127	40	PR
1,1-Dichloroethene	0	0.0561	0.0546	97	0.056	0.0524	94	4	69	122	40	PR
Benzene	0	0.0561	0.0562	100	0.056	0.0528	94	6	68	124	40	PR
Chlorobenzene	0	0.0561	0.0519	93	0.056	0.0526	94	2	73	127	40	PR
Chloroform	0	0.0561	0.0569	101	0.056	0.0541	97	4	63	117	40	PR
Dibromochloromethane	0	0.0561	0.0514	92	0.056	0.0548	98	6	64	120	40	PR
Ethylbenzene	0	0.0561	0.0523	93	0.056	0.0531	95	2	72	125	40	PR
Tetrachloroethene	0	0.0561	0.0457	82	0.056	0.0462	83	1	66	116	40	PR
Toluene	0.0075	0.0561	0.052	79	0.056	0.0568	88	10	73	122	40	PR
Trichloroethene	0	0.0561	0.0543	97	0.056	0.0555	99	2	76	117	40	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

000284

MSD : SW8240 initial Extraction : NONE Matrix : SQ Units : mg/Kg Next Sample : AA81027	MS Sample Name : OT3822SAMS MS LIMS ID : AA83086 MS Extraction : MS Extraction : MS Analysis : 10/31/95 MS Analysis : 07:19	MSD Sample Name : OT3822SAMSD MSD LIMS ID : AA83097 MSD Extraction : MSD Extraction : MSD Analysis : 10/31/95 MSD Analysis : 07:46
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Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0615	0.0645	105	0.0616	0.0633	103	2	69	127	40	PR
1,1-Dichloroethene	0	0.0615	0.0645	105	0.0616	0.0646	105	0	69	122	40	PR
Benzene	0	0.0615	0.0633	103	0.0616	0.0641	104	1	68	124	40	PR
Chlorobenzene	0	0.0615	0.0593	96	0.0616	0.0601	96	1	73	127	40	PR
Chloroform	0	0.0615	0.063	102	0.0616	0.0635	103	1	63	117	40	PR
Dibromochloromethane	0	0.0615	0.058	94	0.0616	0.0614	100	6	64	120	40	PR
Ethylbenzene	0	0.0615	0.0611	99	0.0616	0.0624	101	2	72	125	40	PR
Tetrachloroethene	0	0.0615	0.0589	96	0.0616	0.0596	97	1	66	116	40	PR
Toluene	0.00506	0.0615	0.068	102	0.0616	0.071	107	5	73	122	40	PR
Trichloroethene	0	0.0615	0.0633	103	0.0616	0.0642	104	1	76	117	40	PR

**Law Engineering and Environmental Services, Inc.
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MSD : SW8240

MS Sample Name : OT3830SAMS

MSD Sample Name : OT3830SAMSD

initial

MS LIMS ID : AA81048

MSD LIMS ID : AA81049

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/3/95

MSD Analysis : 11/3/95

Neat Sample : AA81047

MS Analysis : 07:07

MSD Analysis : 07:33

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0573	0.0608	106	0.0575	0.058	101	5	69	127	40	PR
1,1-Dichloroethene	0	0.0573	0.0634	111	0.0575	0.0595	103	7	69	122	40	PR
Benzene	0	0.0573	0.0604	105	0.0575	0.0588	102	3	68	124	40	PR
Chlorobenzene	0	0.0573	0.0574	100	0.0575	0.0555	96	4	73	127	40	PR
Chloroform	0	0.0573	0.0605	106	0.0575	0.0578	100	6	63	117	40	PR
Dibromochloromethane	0	0.0573	0.0513	90	0.0575	0.0522	91	1	64	120	40	PR
Ethylbenzene	0	0.0573	0.0607	106	0.0575	0.059	103	3	72	125	40	PR
Tetrachloroethene	0	0.0573	0.0525	92	0.0575	0.05	87	5	66	116	40	PR
Toluene	0.00163	0.0573	0.0581	99	0.0575	0.058	98	1	73	122	40	PR
Trichloroethene	0	0.0573	0.0582	102	0.0575	0.0573	100	2	76	117	40	PR

MSD : SW8240

MS Sample Name : OT3850SAMS

MSD Sample Name : OT3850SAMSD

initial

MS LIMS ID : AA81054

MSD LIMS ID : AA81055

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/3/95

MSD Analysis : 11/3/95

Neat Sample : AA81053

MS Analysis : 08:00

MSD Analysis : 08:27

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0549	0.0548	100	0.0551	0.0538	98	2	69	127	40	PR
1,1-Dichloroethene	0	0.0549	0.057	104	0.0551	0.056	102	2	69	122	40	PR
Benzene	0	0.0549	0.0566	103	0.0551	0.0553	100	3	68	124	40	PR
Chlorobenzene	0	0.0549	0.0525	96	0.0551	0.0523	95	1	73	127	40	PR
Chloroform	0	0.0549	0.0553	101	0.0551	0.0551	100	1	63	117	40	PR
Dibromochloromethane	0	0.0549	0.0487	89	0.0551	0.0489	89	0	64	120	40	PR
Ethylbenzene	0	0.0549	0.0549	100	0.0551	0.0547	99	1	72	125	40	PR
Tetrachloroethene	0	0.0549	0.0462	84	0.0551	0.0424	77	9	66	116	40	PR
Toluene	0.000918	0.0549	0.0543	97	0.0551	0.0524	93	4	73	122	40	PR
Trichloroethene	0	0.0549	0.054	98	0.0551	0.0516	94	5	76	117	40	PR

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MSD : SW8240	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : NONE	MS Extraction :	MSD Extraction :
Matrix : SO	MS Extraction :	MSD Extraction :
Units : mg/Kg	MS Analysis : 11/3/95	MSD Analysis : 11/3/95
Net Sample : AA81058	MS Analysis : 08:53	MSD Analysis : 08:20

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0579	0.0566	98	0.0582	0.0566	97	1	69	127	40	PR
1,1-Dichloroethene	0	0.0579	0.0573	99	0.0582	0.0574	99	1	69	122	40	PR
Benzene	0	0.0579	0.0582	101	0.0582	0.0585	100	1	68	124	40	PR
Chlorobenzene	0	0.0579	0.0563	97	0.0582	0.0548	94	3	73	127	40	PR
Chloroform	0	0.0579	0.0578	100	0.0582	0.0574	99	1	63	117	40	PR
Dibromochloromethane	0	0.0579	0.0559	97	0.0582	0.0529	91	6	64	120	40	PR
Ethylbenzene	0	0.0579	0.059	102	0.0582	0.058	100	2	72	125	40	PR
Tetrachloroethene	0	0.0579	0.0509	88	0.0582	0.0505	87	1	66	116	40	PR
Toluene	0.00067	0.0579	0.0551	94	0.0582	0.0558	95	1	73	122	40	PR
Trichloroethene	0	0.0579	0.0562	97	0.0582	0.0567	97	0	76	117	40	PR

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MSD : SW8270

MS Sample Name : OT3913SAMS

MSD Sample Name : OT3913SAMSD

initial

MS LIMS ID : AA81014

MSD LIMS ID : AA81015

Extraction : SW3550

MS Extraction : 11/2/95

MSD Extraction : 11/2/95

Matrix : SO

MS Extraction : 11:05

MSD Extraction : 11:05

Units : mg/Kg

MS Analysis : 11/12/95

MSD Analysis : 11/12/95

Neat Sample : AA81013

MS Analysis : 08:56

MSD Analysis : 08:50

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	4.073	2.45	60	4.104	2.33	57	6	44	142	40	PR
1,4-Dichlorobenzene	0	4.073	2.11	52	4.104	1.99	49	7	20	124	40	PR
2,4-Dinitrotoluene	0	4.073	2.26	56	4.104	2.31	56	1	47	129	40	PR
2-Chlorophenol	0	6.11	3.72	61	6.156	3.42	56	9	23	127	40	PR
4-Chloro-3-methylphenol	0	6.11	4.04	66	6.156	3.94	64	3	39	131	40	PR
4-Nitrophenol	0	6.11	3.34	55	6.156	3.63	59	8	0	132	40	PR
Acenaphthene	0	4.073	2.66	65	4.104	2.53	62	6	47	135	40	PR
Benz(a)anthracene	0	4.073	3.01	74	4.104	2.95	72	3	43	136	40	PR
Benzo(a)pyrene	0	4.073	3.56	87	4.104	3.59	88	0	17	152	40	PR
Butyl benzyl phthalate	0	4.073	3.6	88	4.104	3.53	86	3	54	143	40	PR
Hexachlorobenzene	0	4.073	3.01	74	4.104	3	73	1	42	144	40	PR
Naphthalene	0	4.073	2.41	59	4.104	2.28	56	6	33	127	40	PR
Pentachlorophenol	0	6.11	2.63	43	6.156	2.52	41	5	14	155	40	PR
Phenol	0	6.11	3.49	57	6.156	3.42	56	3	29	112	40	PR
Pyrene	0	4.073	4.18	103	4.104	4.09	100	3	60	115	40	PR
bis(2-Chloroethoxy)methane	0	4.073	2.52	62	4.104	2.47	60	3	33	154	40	PR
n-Nitrosodi-n-propylamine	0	4.073	2.73	67	4.104	2.72	66	1	0	139	40	PR

MSD : SW8270		MS Sample Name : OT3840SAMS				MSD Sample Name : OT3840SAMSD							
initial		MS LIMS ID : AA81022				MSD LIMS ID : AA81023							
Extraction : SW3550		MS Extraction : 11/2/95				MSD Extraction : 11/2/95							
Matrix : SO		MS Extraction : 11:05				MSD Extraction : 11:05							
Units : mg/Kg		MS Analysis : 11/12/95				MSD Analysis : 11/12/95							
Neat Sample : AA81021		MS Analysis : 16:09				MSD Analysis : 17:03							

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
1,2,4-Trichlorobenzene	0	3.676	2.48	68	3.64	2.04	56	19	44	142	40	PR
1,4-Dichlorobenzene	0	3.676	2.14	58	3.64	1.65	45	25	20	124	40	PR
2,4-Dinitrotoluene	0	3.676	0.911	25	3.64	0.674	19	29	47	129	40	PR
2-Chlorophenol	0	5.513	3.73	68	5.46	3.02	55	20	23	127	40	PR
4-Chloro-3-methylphenol	0	5.513	4.16	76	5.46	3.62	66	13	39	131	40	PR
4-Nitrophenol	0	5.513	2.49	45	5.46	1.77	32	33	0	132	40	PR
Acenaphthene	0	3.676	2.53	69	3.64	2.11	58	17	47	135	40	PR
Benz(a)anthracene	0	3.676	3	82	3.64	2.5	69	17	43	136	40	PR
Benzo(a)pyrene	0	3.676	3.64	99	3.64	3.09	85	15	17	152	40	PR
Butyl benzyl phthalate	0	3.676	4.06	110	3.64	3.99	110	0	54	143	40	PR
Hexachlorobenzene	0	3.676	3.06	83	3.64	2.77	76	9	42	144	40	PR
Naphthalene	0	3.676	2.46	67	3.64	2.03	56	18	33	127	40	PR
Pentachlorophenol	0	5.513	2.7	49	5.46	2.28	41	17	14	155	40	PR
Phenol	0	5.513	3.46	63	5.46	2.86	52	18	29	112	40	PR
Pyrene	0.0732	3.676	4.88	131	3.64	4.89	132	1	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.676	2.61	71	3.64	2.12	58	20	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.676	2.68	73	3.64	2.22	61	18	0	139	40	PR

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MSD : SW8270	MS Sample Name : OT3815SAMS	MSD Sample Name : OT3815SAMS
Initial	MS LIMS ID : AA81075	MSD LIMS ID : AA81075
Extraction : SW3550	MS Extraction : 11/3/95	MSD Extraction : 11/3/95
Matrix : SO	MS Extraction : 14:00	MSD Extraction : 14:00
Units : mg/Kg	MS Analysis : 11/20/95	MSD Analysis : 11/20/95
Neat Sample : AA81074	MS Analysis : 02:00	MSD Analysis : 02:55

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.752	2.33	62	3.727	2.34	63	1	44	142	40	PR
1,4-Dichlorobenzene	0	3.752	2.13	57	3.727	2.12	57	0	20	124	40	PR
2,4-Dinitrotoluene	0	3.752	2.14	57	3.727	1.91	51	11	47	129	40	PR
2-Chlorophenol	0	5.627	3.27	58	5.59	3.34	60	3	23	127	40	PR
4-Chloro-3-methylphenol	0	5.627	3.79	67	5.59	3.73	67	1	39	131	40	PR
4-Nitrophenol	0	5.627	3.12	55	5.59	2.44	44	24	0	132	40	PR
Acenaphthene	0	3.752	2.67	71	3.727	2.52	68	5	47	135	40	PR
Benz(a)anthracene	0	3.752	3.22	86	3.727	2.66	77	11	43	136	40	PR
Benzo(a)pyrene	0	3.752	2.96	79	3.727	2.73	73	7	17	152	40	PR
Butyl benzyl phthalate	0	3.752	3.18	85	3.727	2.8	75	12	54	143	40	PR
Hexachlorobenzene	0	3.752	2.68	71	3.727	2.49	67	7	42	144	40	PR
Naphthalene	0	3.752	2.36	63	3.727	2.38	64	2	33	127	40	PR
Pentachlorophenol	0	5.627	0.981	17	5.59	0.894	16	8	14	155	40	PR
Phenol	0	5.627	3.01	54	5.59	3.24	58	8	29	112	40	PR
Pyrene	0	3.752	3.09	82	3.727	2.92	78	5	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.752	2.34	62	3.727	2.34	63	1	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.752	2.26	60	3.727	2.37	64	5	0	139	40	PR

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National Laboratories - Pensacola

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MSD : SW8270 initial Extraction : SW3550 Matrix : SQ Units : mg/Kg Net Sample : AA81034	MS Sample Name : FDUP-04MS MS LIMS ID : AA84701 MS Extraction : 11/3/95 MS Extraction : 15:30 MS Analysis : 11/27/95 MS Analysis : 17:39	MSD Sample Name : FDUP-04MSD MSD LIMS ID : AA84702 MSD Extraction : 11/3/95 MSD Extraction : 15:30 MSD Analysis : 11/27/95 MSD Analysis : 18:33
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Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.838	2.38	62	3.822	2.22	58	6	44	142	40	PR
1,4-Dichlorobenzene	0	3.838	2.16	56	3.822	1.98	52	8	20	124	40	PR
2,4-Dinitrotoluene	0	3.838	2.46	64	3.822	2.42	63	1	47	129	40	PR
2-Chlorophenol	0	5.756	3.47	60	5.734	3.16	55	9	23	127	40	PR
4-Chloro-3-methylphenol	0	5.756	4	70	5.734	3.61	66	5	39	131	40	PR
4-Nitrophenol	0	5.756	5.41	94	5.734	5.65	99	5	0	132	40	PR
Acenaphthene	0	3.838	2.39	62	3.822	2.3	60	3	47	135	40	PR
Benz(a)anthracene	0	3.838	2.69	75	3.822	2.81	74	2	43	136	40	PR
Benzo(a)pyrene	0	3.838	2.72	71	3.822	2.64	69	3	17	152	40	PR
Butyl benzyl phthalate	0	3.838	2.94	77	3.822	2.86	75	2	54	143	40	PR
Hexachlorobenzene	0	3.838	2.7	70	3.822	2.63	69	2	42	144	40	PR
Naphthalene	0	3.838	2.27	59	3.822	2.13	56	6	33	127	40	PR
Pentachlorophenol	0	5.756	1.35	24	5.734	1.25	22	8	14	155	40	PR
Phenol	0	5.756	2.52	44	5.734	2.32	41	8	29	112	40	PR
Pyrene	0	3.838	2.92	76	3.822	2.83	74	3	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.838	2.38	62	3.822	2.18	57	8	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.838	2.52	66	3.822	2.34	61	7	0	139	40	PR

Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola

MSD : SW8270	MS Sample Name : OT3830SAMS	MSD Sample Name : OT3830SAMSD
initial	MS LIMS ID : AA81048	MSD LIMS ID : AA81049
Extraction : SW3550	MS Extraction : 10/31/95	MSD Extraction : 10/31/95
Matrix : SO	MS Extraction : 13:15	MSD Extraction : 13:15
Units : mg/Kg	MS Analysis : 11/20/95	MSD Analysis : 11/20/95
Neat Sample : AA81047	MS Analysis : 13:50	MSD Analysis : 14:44

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.873	2.63	68	3.77	2.15	57	17	44	142	40	PR
1,4-Dichlorobenzene	0	3.873	2.25	58	3.77	1.84	49	17	20	124	40	PR
2,4-Dinitrotoluene	0	3.873	2.92	75	3.77	2.3	61	21	47	129	40	PR
2-Chlorophenol	0	5.809	3.87	67	5.855	3.17	56	17	23	127	40	PR
4-Chloro-3-methylphenol	0	5.809	4.33	75	5.855	3.56	63	17	39	131	40	PR
4-Nitrophenol	0	5.809	5.75	99	5.855	4.36	77	25	0	132	40	PR
Acenaphthene	0	3.873	2.82	73	3.77	2.3	61	18	47	135	40	PR
Benz(a)anthracene	0	3.873	3.59	93	3.77	2.79	74	22	43	136	40	PR
Benzo(a)pyrene	0	3.873	3.3	85	3.77	2.62	70	20	17	152	40	PR
Butyl benzyl phthalate	0	3.873	3.92	101	3.77	3.1	82	21	54	143	40	PR
Hexachlorobenzene	0	3.873	3.27	84	3.77	2.65	70	18	42	144	40	PR
Naphthalene	0	3.873	2.56	66	3.77	2.09	55	18	33	127	40	PR
Pentachlorophenol	0	5.809	2.99	52	5.855	2.16	38	30	14	155	40	PR
Phenol	0	5.809	3.54	61	5.855	2.87	51	18	29	112	40	PR
Pyrene	0	3.873	3.91	101	3.77	3.17	84	18	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.873	2.75	71	3.77	2.26	60	17	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.873	3.06	79	3.77	2.48	66	18	0	139	40	PR

MSD : SW8270	MS Sample Name : OT3850SAMS	MSD Sample Name : OT3850SAMSD
initial	MS LIMS ID : AA81054	MSD LIMS ID : AA81055
Extraction : SW3550	MS Extraction : 10/31/95	MSD Extraction : 10/31/95
Matrix : SO	MS Extraction : 13:15	MSD Extraction : 13:15
Units : mg/Kg	MS Analysis : 11/20/95	MSD Analysis : 11/20/95
Neat Sample : AA81053	MS Analysis : 17:27	MSD Analysis : 18:21

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.744	1.91	51	3.694	2.09	57	10	44	142	40	PR
1,4-Dichlorobenzene	0	3.744	1.63	44	3.694	1.8	49	11	20	124	40	PR
2,4-Dinitrotoluene	0	3.744	2.02	54	3.694	1.98	54	1	47	129	40	PR
2-Chlorophenol	0	5.616	2.77	49	5.54	2.98	54	9	23	127	40	PR
4-Chloro-3-methylphenol	0	5.616	3.26	58	5.54	3.33	60	4	39	131	40	PR
4-Nitrophenol	0	5.616	3.72	66	5.54	3.96	72	8	0	132	40	PR
Acenaphthene	0	3.744	2.12	57	3.694	2.13	58	2	47	135	40	PR
Benz(a)anthracene	0	3.744	2.57	69	3.694	2.52	68	1	43	136	40	PR
Benzo(a)pyrene	0	3.744	2.43	65	3.694	2.38	64	1	17	152	40	PR
Butyl benzyl phthalate	0	3.744	2.93	78	3.694	2.81	76	3	54	143	40	PR
Hexachlorobenzene	0	3.744	2.56	68	3.694	2.54	69	1	42	144	40	PR
Naphthalene	0	3.744	1.86	50	3.694	2.02	55	10	33	127	40	PR
Pentachlorophenol	0	5.616	1.5	27	5.54	1.37	25	8	14	155	40	PR
Phenol	0	5.616	2.54	45	5.54	2.72	49	8	29	112	40	PR
Pyrene	0	3.744	3.03	81	3.694	2.8	76	7	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.744	2.02	54	3.694	2.14	58	7	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.744	2.14	57	3.694	2.31	63	9	0	139	40	PR

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National Laboratories - Pensacola**

MSD : SW8270	MS Sample Name : OT3820SAMS	MSD Sample Name : OT3820SAMSD
initial	MS LIMS ID : AA81059	MSD LIMS ID : AA81060
Extraction : SW3550	MS Extraction : 10/31/95	MSD Extraction : 10/31/95
Matrix : SO	MS Extraction : 13:15	MSD Extraction : 13:15
Units : mg/Kg	MS Analysis : 11/18/95	MSD Analysis : 11/18/95
Net Sample : AA81058	MS Analysis : 19:20	MSD Analysis : 20:14

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.78	2.66	70	3.887	2.27	58	19	44	142	40	PR
1,4-Dichlorobenzene	0	3.78	2.26	60	3.887	1.87	48	22	20	124	40	PR
2,4-Dinitrotoluene	0	3.78	2.57	68	3.887	2.12	55	22	47	129	40	PR
2-Chlorophenol	0	5.67	2.77	49	5.83	3.32	57	15	23	127	40	PR
4-Chloro-3-methylphenol	0	5.67	4.46	79	5.83	3.67	63	22	39	131	40	PR
4-Nitrophenol	0	5.67	6.04	107	5.83	4.69	80	28	0	132	40	PR
Acenaphthene	0	3.78	2.49	66	3.887	2.17	56	17	47	135	40	PR
Benz(a)anthracene	0	3.78	3.37	89	3.887	2.77	71	22	43	136	40	PR
Benzo(a)pyrene	0	3.78	3.24	86	3.887	2.17	56	42	17	152	40	PR
Butyl benzyl phthalate	0	3.78	3.64	96	3.887	3.08	79	19	54	143	40	PR
Hexachlorobenzene	0	3.78	2.64	70	3.887	2.29	59	17	42	144	40	PR
Naphthalene	0	3.78	2.52	67	3.887	2.19	56	17	33	127	40	PR
Pentachlorophenol	0	5.67	3.03	53	5.83	2.24	38	33	14	155	40	PR
Phenol	0	5.67	3.57	63	5.83	3.1	53	17	29	112	40	PR
Pyrene	0	3.78	3.69	98	3.887	3.23	83	16	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.78	2.58	68	3.887	2.17	56	20	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.78	2.92	77	3.887	2.37	61	24	0	139	40	PR

APPENDIX B-2**GROUNDS MAINTENANCE YARD****Sample Identification**

OT3913SA MS
OT3913SA MSD

OT2920SA MS
OT3920SA MSD

OT3930SA MS
OT3930SA MSD

METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 52C81007

Matrix Spike - Lab ID No.: OT3913SA/AA81013

Level: (low/med) LOW

OT3913SAMS/AA81014	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	43.2	0.00	8.89	21 *	75 - 125
Barium	173	182	377	113	75 - 125
Beryllium	4.32	0.00	5.18	120	75 - 125
Cadmium	4.32	0.00	2.76	64 *	75 - 125
Calcium					
Chromium	17.3	0.00	26.8	155 *	75 - 125
Cobalt	43.2	2.03	44.1	97	75 - 125
Copper	21.6	8.84	25.9	79	75 - 125
Iron					
Magnesium					
Manganese	43.2	406	472	154 *	75 - 125
Molybdenum	43.2	1.86	31.9	70 *	75 - 125
Nickel	43.2	236	271	82	75 - 125
Potassium					
Silver	8.63	0.00	8.80	102	75 - 125
Sodium					
Thallium	173	0.00	164	95	75 - 125
Vanadium	43.2	5.83	46.2	93	75 - 125
Zinc	43.2	75.1	115	93	75 - 125

Spike Recovery: 5 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

3 - 6010

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 52C81007

Matrix Spike - Lab ID No.: OT3913SA/AA81013

Level: (low/med) LOW

OT3913SAMS/AA81015	SPIKE	MSD	MSD	% RPD		QC
COMPOUND	ADDED	CONCENTRATION	%	#	#	LIMITS
	(mg/Kg)	(mg/Kg)	REC.		RPD	REC.
Aluminum						
Antimony	47.4	8.24	17	*	17	20
Barium	189	369	98		14	20
Beryllium	4.74	5.18	109		9	20
Cadmium	4.74	3.79	80		22 *	20
Calcium						
Chromium	18.9	26.8	141	*	9	20
Cobalt	47.4	48.3	98		0	20
Copper	23.7	28.5	83		5	20
Iron						
Magnesium						
Manganese	47.4	431	53	*	98 *	20
Molybdenum	47.4	34.6	69	*	1	20
Nickel	47.4	297	130	*	45 *	20
Potassium						
Silver	9.5	9.56	101		1	20
Sodium						
Thallium	189	183	97		2	20
Vanadium	47.4	50.9	95		2	20
Zinc	47.4	124	104		12	20

Spike Recovery: 5 out of 20 outside limits.

RPD: 3 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

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**METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 57C81197

Matrix Spike - Lab ID No.: OT3920SA/AA81210

Level: (low/med) LOW

OT3920SAMS/AA81211	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	45.7	0.00	9.95	22 *	75 - 125
Barium	183	112	438	179 *	75 - 125
Beryllium	4.57	0.00	3.65	80	75 - 125
Cadmium	4.57	0.00	2.10	46 *	75 - 125
Calcium					
Chromium	18.3	7.82	29.2	117	75 - 125
Cobalt	45.7	2.69	45.5	94	75 - 125
Copper	22.8	3.48	33.8	133 *	75 - 125
Iron					
Magnesium					
Manganese	45.7	328	390	134 *	75 - 125
Molybdenum	45.7	0.00	39.4	86	75 - 125
Nickel	45.7	233	288.9	122	75 - 125
Potassium					
Silver	9.13	0.00	9.22	101	75 - 125
Sodium					
Thallium	183	0.00	177	97	75 - 125
Vanadium	45.7	10.0	49.1	86	75 - 125
Zinc	45.7	95.2	139.2	96	75 - 125

Spike Recovery: 5 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
Calcium Potassium
Iron Sodium

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3 - 6010

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METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 57C81197

Matrix Spike - Lab ID No.: OT3920SA/AA81210

Level: (low/med) LOW

OT3920SAMS/AA81212	SPIKE ADDED	MSD CONCENTRATION	MSD %	% # RPD # RPD		QC LIMITS	
COMPOUND	(mg/Kg)	(mg/Kg)	REC.			REC.	
Aluminum							
Antimony	42.4	8.06	19	*	14	20	75 - 125
Barium	170	307	115		43	* 20	75 - 125
Beryllium	4.24	3.39	80		0	20	75 - 125
Cadmium	4.24	2.97	70	*	41	* 20	75 - 125
Calcium							
Chromium	17.0	34.8	159	*	30	* 20	75 - 125
Cobalt	42.4	43.1	95		2	20	75 - 125
Copper	21.2	31.4	132	*	1	20	75 - 125
Iron							
Magnesium		39.9	166		21		
Manganese	42.4	51.74	11,427	*	105	* 20	75 - 125
Molybdenum	42.4	33.8	80		8	20	75 - 125
Nickel	42.4	268	83		38	* 20	75 - 125
Potassium							
Silver	8.5	8.48	100		1	20	75 - 125
Sodium							
Thallium	170	168	99		2	20	75 - 125
Vanadium	42.4	46.0	85		1	20	75 - 125
Zinc	42.4	126	72	*	28	* 20	75 - 125

Spike Recovery: 6 out of 20 outside limits.

RPD: 6 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium

Calcium Potassium

Iron Sodium

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METALS BY ICP
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 57C81197

Matrix Spike - Lab ID No.: OT3930SA/AA81197

Level: (low/med) LOW

OT3930SAMS/AA81198	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS %	QC LIMITS
COMPOUND	(mg/Kg)	(mg/Kg)	(mg/Kg)	REC. #	REC.
Aluminum					
Antimony	46.4	2.04	7.80	12 *	75 - 125
Barium	186	100	296	106	75 - 125
Beryllium	4.64	0.74	5.29	98	75 - 125
Cadmium	4.64	0.00	2.23	48 *	75 - 125
Calcium					
Chromium	18.6	9.56	30.9	115	75 - 125
Cobalt	46.4	4.08	50.5	100	75 - 125
Copper	23.2	9.47	32.3	98	75 - 125
Iron					
Magnesium					
Manganese	46.4	397	440	94	75 - 125
Molybdenum	46.4	0.00	31.2	67 *	75 - 125
Nickel	46.4	8.44	57.0	105	75 - 125
Potassium					
Silver	9.28	0.00	9.47	102	75 - 125
Sodium					
Thallium	186	0.00	199	107	75 - 125
Vanadium	46.4	11.0	55.1	95	75 - 125
Zinc	46.4	18.6	68.8	108	75 - 125

Spike Recovery: 3 out of 20 outside limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium
 Calcium Potassium
 Iron Sodium

3 - 6010

METALS BY ICP CONT.
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Law Environmental, Inc.

Contract: 11-3517-32

Lab Code: LENL-P

Case No.: 11517

SDG No.: 57C81197

Matrix Spike - Lab ID No.: OT3930SA/AA81197

Level: (low/med) LOW

OT3930SAMS/AA81199	SPIKE	MSD	MSD	% RPD		QC
COMPOUND	ADDED	CONCENTRATION	%	#	#	LIMITS
	(mg/Kg)	(mg/Kg)	REC.			REC.
Aluminum						
Antimony	42.5	4.33	5	*	79	75 - 125
Barium	170	292	113		7	75 - 125
Beryllium	4.25	4.84	97		2	75 - 125
Cadmium	4.25	1.70	40	*	18	75 - 125
Calcium						
Chromium	17.0	27.9	108		6	75 - 125
Cobalt	42.5	46.1	99		1	75 - 125
Copper	21.2	29.5	95		4	75 - 125
Iron						
Magnesium						
Manganese	42.5	423	62	*	41	75 - 125
Molybdenum	42.5	27.2	64	*	5	75 - 125
Nickel	42.5	51.4	101		3	75 - 125
Potassium						
Silver	8.5	8.83	104		2	75 - 125
Sodium						
Thallium	170	181	107		1	75 - 125
Vanadium	42.5	49.8	91		4	75 - 125
Zinc	42.5	61	99		8	75 - 125

Spike Recovery: 4 out of 20 outside limits.

RPD: 2 out of 20 outside limits.

Column to be used to flag recovery and RPD values with an asterisk.

* Values outside of QC limits.

The following analytes are not included in the ICP spike solution:

Aluminum Magnesium

Calcium Potassium

Iron Sodium

ism3097

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW7421	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
initial	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81013	MS Analysis : 12:19	MSD Analysis : 12:24

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	6.66	4.409	11.7	114	4.664	12	114	0	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
initial	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 11/27/95	MSD Analysis : 11/27/95
Neat Sample : AA81013	MS Analysis : 20:20	MSD Analysis : 20:25

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Selenium	0	4.409	1.03	23	4.664	1.29	28	17	75	125	20	PR

MSD : SW7060	MS Sample Name : OT3840SAMS	MSD Sample Name : OT3840SAMSD
initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 11/28/95	MSD Analysis : 11/28/95
Neat Sample : AA81021	MS Analysis : 05:15	MSD Analysis : 05:20

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Arsenic	2.87	4.241	5.92	72	4.163	5.83	71	1	75	125	20	PR

MSD : SW7421	MS Sample Name : OT3840SAMS	MSD Sample Name : OT3840SAMSD
initial	MS LIMS ID : AA81022	MSD LIMS ID : AA81023
Extraction : SW3050	MS Extraction : 11/8/95	MSD Extraction : 11/8/95
Matrix : SO	MS Extraction : 08:00	MSD Extraction : 08:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81021	MS Analysis : 01:30	MSD Analysis : 01:42

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	1.030	4.241	0	430	4.163	0	2470	2	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : FSB3098

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/11/95

SDG Number : 57C81197

SDGs Included : 57C81197

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3930SA	AA81197	10/24/95	SO	N
OT3930SAMS	AA81198	10/24/95	SO	MS
OT3930SAMSD	AA81199	10/24/95	SO	SD
OT3909SA	AA81200	10/24/95	SO	N
OT3915SA	AA81201	10/24/95	SO	N
OT3916SA	AA81202	10/24/95	SO	N
OT3908SA	AA81203	10/24/95	SO	N
OT3922SA	AA81204	10/24/95	SO	N
OT3927SA	AA81205	10/24/95	SO	N
OT3929SA	AA81206	10/24/95	SO	N
OT3912SA	AA81207	10/24/95	SO	N
OT3928SA	AA81208	10/24/95	SO	N
FDUP07	AA81209	10/24/95	SO	FD
OT3920SA	AA81210	10/24/95	SO	N
OT3920SAMS	AA81211	10/24/95	SO	MS
OT3920SAMSD	AA81212	10/24/95	SO	SD
OT3926SA	AA81213	10/24/95	SO	N
OT3925SA	AA81214	10/24/95	SO	N
FDUP08	AA81215	10/24/95	SO	FD
OT3914SA	AA81216	10/24/95	SO	N
FSB3098	AA82356	11/11/95	SQ	LB
FSL3098	AA82357	11/11/95	SQ	BS

MSD : SW7060

MS Sample Name : OT3930SAMS

MSD Sample Name : OT3930SAMSD

initial

MS LIMS ID : AA81198

MSD LIMS ID : AA81199

Extraction : SW3050

MS Extraction : 11/11/95

MSD Extraction : 11/11/95

Matrix : SO

MS Extraction : 11:00

MSD Extraction : 11:00

Units : mg/Kg

MS Analysis : 11/29/95

MSD Analysis : 11/29/95

Neat Sample : AA81197

MS Analysis : 20:21

MSD Analysis : 20:26

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Arsenic	2.56	4.572	5.04	54	4.371	5.4	65	18	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW7421	MS Sample Name : OT3930SAMS	MSD Sample Name : OT3930SAMSD
initial	MS LIMS ID : AA81198	MSD LIMS ID : AA81199
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81197	MS Analysis : 17:37	MSD Analysis : 17:42

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	10	4.572	15.1	112	4.371	13.6	82	30	75	125	20	PR

MSD : SW7740	MS Sample Name : OT3930SAMS	MSD Sample Name : OT3930SAMSD
initial	MS LIMS ID : AA81198	MSD LIMS ID : AA81199
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 11/30/95	MSD Analysis : 11/30/95
Neat Sample : AA81197	MS Analysis : 19:39	MSD Analysis : 19:44

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Selenium	0	4.572	1.35	30	4.371	1.29	30	0	75	125	20	PR

MSD : SW7060	MS Sample Name : OT3920SAMS	MSD Sample Name : OT3920SAMSD
initial	MS LIMS ID : AA81211	MSD LIMS ID : AA81212
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81210	MS Analysis : 03:05	MSD Analysis : 03:10

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Arsenic	1.39	4.365	5.48	94	4.564	5.35	87	8	75	125	20	PR

MSD : SW7421	MS Sample Name : OT3920SAMS	MSD Sample Name : OT3920SAMSD
initial	MS LIMS ID : AA81211	MSD LIMS ID : AA81212
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81210	MS Analysis : 20:31	MSD Analysis : 20:36

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
Lead	46.7	4.385	56.6	227	4.564	44.2	-55	327	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW7740	MS Sample Name : OT3920SAMS	MSD Sample Name : OT3920SAMSD
initial	MS LIMS ID : AA81211	MSD LIMS ID : AA81212
Extraction : SW3050	MS Extraction : 11/11/95	MSD Extraction : 11/11/95
Matrix : SO	MS Extraction : 11:00	MSD Extraction : 11:00
Units : mg/Kg	MS Analysis : 12/1/95	MSD Analysis : 12/1/95
Neat Sample : AA81210	MS Analysis : 00:02	MSD Analysis : 00:07

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Selenium	0	4.365	0.892	20	4.564	0.903	20	3	75	125	20	PR

LCS : SW7060	Sample Name : FSL3098
initial	LIMS Sample ID : AA82357
Extraction Method : SW3050	Date of Extraction : 11/11/95
Matrix : SQ	Time of Extraction : 11:00
Units : mg/Kg	Date of Analysis : 11/29/95
	Time of Analysis : 19:42

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Arsenic	5	5.03	101	80	120	PR

LCS : SW7421	Sample Name : FSL3098
initial	LIMS Sample ID : AA82357
Extraction Method : SW3050	Date of Extraction : 11/11/95
Matrix : SQ	Time of Extraction : 11:00
Units : mg/Kg	Date of Analysis : 12/1/95
	Time of Analysis : 17:20

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Lead	5	5.03	101	80	120	PR

LCS : SW7740	Sample Name : FSL3098
initial	LIMS Sample ID : AA82357
Extraction Method : SW3050	Date of Extraction : 11/11/95
Matrix : SQ	Time of Extraction : 11:00
Units : mg/Kg	Date of Analysis : 11/30/95
	Time of Analysis : 17:25

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
Selenium	5	5.04	101	80	120	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HGSB0488

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/3/95

SDG Number : 52C81007

SDGs Included : 52C81007

Samples in Batch				
Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3905SA	AA81007	10/23/95	SO	N
OT3918SA	AA81008	10/23/95	SO	N
OT3910SA	AA81009	10/23/95	SO	N
OT3917SA	AA81010	10/23/95	SO	N
FDUP-06	AA81011	10/23/95	SO	FD
OT3911SA	AA81012	10/23/95	SO	N
OT3913SA	AA81013	10/23/95	SO	N
OT3913SAMS	AA81014	10/23/95	SO	MS
OT3913SAMSD	AA81015	10/23/95	SO	SD
OT3845SA	AA81016	10/23/95	SO	N
OT3842SA	AA81017	10/23/95	SO	N
OT3827SA	AA81018	10/23/95	SO	N
OT3825SA	AA81019	10/23/95	SO	N
OT3832SA	AA81020	10/23/95	SO	N
OT3840SA	AA81021	10/23/95	SO	N
OT3840SAMS	AA81022	10/23/95	SO	MS
OT3840SAMSD	AA81023	10/23/95	SO	SD
FDUP-02	AA81024	10/23/95	SO	FD
OT3844SA	AA81025	10/23/95	SO	N
OT3824SA	AA81026	10/23/95	SO	N
HGSB0488	AA81457	11/3/95	SQ	LB
HGSL0488	AA81458	11/3/95	SQ	BS

MSD : SW7471

MS Sample Name : OT3913SAMS

MSD Sample Name : OT3913SAMSD

initial

MS LIMS ID : AA81014

MSD LIMS ID : AA81015

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/3/95

MSD Analysis : 11/3/95

Net Sample : AA81013

MS Analysis : 13:37

MSD Analysis : 13:39

Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RPD CL	RC
Mercury	0	0.475	0.499	105		0.556	0.574	103		2		75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HGSB0493

Project Name : CARSWELL SOIL
Project Number : 11-3517
SDG Number : 57C81197

Concentration Level : LOW
Batch Prep Date : 11/6/95
SDGs Included : 57C81197 58C81217

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3930SA	AA81197	10/24/95	SO	N
OT3930SAMS	AA81198	10/24/95	SO	MS
OT3930SAMSD	AA81199	10/24/95	SO	SD
OT3909SA	AA81200	10/24/95	SO	N
OT3915SA	AA81201	10/24/95	SO	N
OT3916SA	AA81202	10/24/95	SO	N
OT3908SA	AA81203	10/24/95	SO	N
OT3922SA	AA81204	10/24/95	SO	N
OT3927SA	AA81205	10/24/95	SO	N
OT3929SA	AA81206	10/24/95	SO	N
OT3912SA	AA81207	10/24/95	SO	N
OT3928SA	AA81208	10/24/95	SO	N
FDUP07	AA81209	10/24/95	SO	FD
OT3920SA	AA81210	10/24/95	SO	N
OT3920SAMS	AA81211	10/24/95	SO	MS
OT3920SAMSD	AA81212	10/24/95	SO	SD
OT3926SA	AA81213	10/24/95	SO	N
OT3925SA	AA81214	10/24/95	SO	N
FDUP08	AA81215	10/24/95	SO	FD
OT3914SA	AA81216	10/24/95	SO	N
HGSB0493	AA82352	11/7/95	SQ	LB
HGSL0493	AA82353	11/7/95	SQ	BS

MSD : SW7471

MS Sample Name : OT3930SAMS

MSD Sample Name : OT3930SAMSD

initial

MS LIMS ID : AA81198

MSD LIMS ID : AA81199

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/7/95

MSD Analysis : 11/7/95

Next Sample : AA81197

MS Analysis : 13:22

MSD Analysis : 13:24

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
Mercury	0	0.594	0.561	95	0.55	0.537	98	3	75	125	20	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW7471 initial Extraction : NONE Matrix : SO Units : mg/Kg Neat Sample : AA81210	MS Sample Name : OT3920SAMS MS LIMS ID : AA81211 MS Extraction : MS Extraction : MS Analysis : 11/7/95 MS Analysis : 13:52	MSD Sample Name : OT3920SAMSD MSD LIMS ID : AA81212 MSD Extraction : MSD Extraction : MSD Analysis : 11/7/95 MSD Analysis : 13:54
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Analyte	Original Conc	MS Spike	MS Conc.	MS %	*	MSD Spike	MSD Conc.	MSD %	*	RPD	*	LCL	UCL	RP D CL	RC
Mercury	0	0.567	0.528	93		0.525	0.496	95		1		75	125	20	PR

LCS : SW7471 initial Extraction Method : NONE Matrix : SQ Units : mg/Kg	Sample Name : HGSL0493 LIMS Sample ID : AA82353 Date of Extraction : Time of Extraction : Date of Analysis : 11/7/95 Time of Analysis : 13:18
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Analyte	LCS Spike	LCS Conc.	LCS %	*	LCL	UCL	RC
Mercury	0.469	0.443	94		80	120	PR

Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola

MSD : SW8240		MS Sample Name : OT3913SAMS				MSD Sample Name : OT3913SAMSD							
Initial		MS LIMS ID : AA81014				MSD LIMS ID : AA81015							
Extraction : NONE		MS Extraction :				MSD Extraction :							
Matrix : SO		MS Extraction :				MSD Extraction :							
Units : mg/Kg		MS Analysis : 10/30/95				MSD Analysis : 10/30/95							
Next Sample : AA81013		MS Analysis : 09:06				MSD Analysis : 08:36							
Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC	
1,1,1-Trichloroethane	0	0.061	0.0633	104	0.0605	0.0598	97	7	69	127	40	PR	
1,1-Dichloroethene	0	0.061	0.0647	106	0.0605	0.058	96	10	68	122	40	PR	
Benzene	0	0.061	0.0633	104	0.0605	0.0595	98	6	68	124	40	PR	
Chlorobenzene	0	0.061	0.0594	97	0.0605	0.0572	95	3	73	127	40	PR	
Chloroform	0	0.061	0.0623	102	0.0605	0.0584	97	6	63	117	40	PR	
Dibromochloromethane	0	0.061	0.0561	92	0.0605	0.0546	90	2	64	120	40	PR	
Ethylbenzene	0	0.061	0.0629	103	0.0605	0.0596	99	4	72	125	40	PR	
Tetrachloroethene	0	0.061	0.0539	88	0.0605	0.0502	83	6	66	116	40	PR	
Toluene	0.0125	0.061	0.0625	115	0.0605	0.0624	82	33	73	122	40	PR	
Trichloroethene	0	0.061	0.0625	102	0.0605	0.0581	96	4	76	117	40	PR	

MSD : SW8240		MS Sample Name : OT3840SAMS				MSD Sample Name : OT3840SAMSD							
Initial		MS LIMS ID : AA81022				MSD LIMS ID : AA81023							
Extraction : NONE		MS Extraction :				MSD Extraction :							
Matrix : SO		MS Extraction :				MSD Extraction :							
Units : mg/Kg		MS Analysis : 10/30/95				MSD Analysis : 10/30/95							
Next Sample : AA81021		MS Analysis : 10:03				MSD Analysis : 10:30							

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0557	0.0496	89	0.0552	0.0471	85	4	69	127	40	PR
1,1-Dichloroethene	0	0.0557	0.0548	98	0.0552	0.0508	92	7	69	122	40	PR
Benzene	0	0.0557	0.0534	96	0.0552	0.0505	92	5	68	124	40	PR
Chlorobenzene	0	0.0557	0.0537	97	0.0552	0.0504	91	6	73	127	40	PR
Chloroform	0	0.0557	0.0533	96	0.0552	0.0512	93	3	63	117	40	PR
Dibromochloromethane	0	0.0557	0.0469	84	0.0552	0.0465	84	0	64	120	40	PR
Ethylbenzene	0	0.0557	0.0516	93	0.0552	0.0494	90	4	72	125	40	PR
Tetrachloroethene	0	0.0557	0.0349	63	0.0552	0.0312	57	10	66	116	40	PR
Toluene	0.00125	0.0557	0.0522	92	0.0552	0.0627	111	19	73	122	40	PR
Trichloroethene	0	0.0557	0.0509	91	0.0552	0.0483	88	4	76	117	40	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

MSD : SW8240

MS Sample Name : OT3930SAMS

MSD Sample Name : OT3930SAMSD

initial

MS LIMS ID : AA81198

MSD LIMS ID : AA81199

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/8/95

MSD Analysis : 11/8/95

Neat Sample : AA81197

MS Analysis : 06:23

MSD Analysis : 06:50

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0625	0.067	107	0.0629	0.0656	104	3	69	127	40	PR
1,1-Dichloroethene	0	0.0625	0.0635	102	0.0629	0.0631	100	2	69	122	40	PR
Benzene	0	0.0625	0.0661	106	0.0629	0.065	103	3	68	124	40	PR
Chlorobenzene	0	0.0625	0.0603	96	0.0629	0.0604	96	0	73	127	40	PR
Chloroform	0	0.0625	0.0657	105	0.0629	0.065	103	2	63	117	40	PR
Dibromochloromethane	0	0.0625	0.0567	91	0.0629	0.0612	97	7	64	120	40	PR
Ethylbenzene	0	0.0625	0.0647	103	0.0629	0.0648	103	0	72	125	40	PR
Tetrachloroethene	0.00358	0.0625	0.0618	93	0.0629	0.0622	93	0	66	116	40	PR
Toluene	0.0023	0.0625	0.0682	105	0.0629	0.0679	104	1	73	122	40	PR
Trichloroethene	0	0.0625	0.0655	105	0.0629	0.0642	102	3	76	117	40	PR

MSD : SW8240

MS Sample Name : OT3920SAMS

MSD Sample Name : OT3920SAMSD

initial

MS LIMS ID : AA81211

MSD LIMS ID : AA81212

Extraction : NONE

MS Extraction :

MSD Extraction :

Matrix : SO

MS Extraction :

MSD Extraction :

Units : mg/Kg

MS Analysis : 11/8/95

MSD Analysis : 11/8/95

Neat Sample : AA81210

MS Analysis : 07:17

MSD Analysis : 07:43

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,1,1-Trichloroethane	0	0.0603	0.0608	101	0.0607	0.0635	105	4	69	127	40	PR
1,1-Dichloroethene	0	0.0603	0.0585	97	0.0607	0.0619	102	5	69	122	40	PR
Benzene	0	0.0603	0.062	103	0.0607	0.0647	107	4	68	124	40	PR
Chlorobenzene	0	0.0603	0.0579	96	0.0607	0.0586	97	1	73	127	40	PR
Chloroform	0	0.0603	0.062	103	0.0607	0.0636	105	2	63	117	40	PR
Dibromochloromethane	0	0.0603	0.0554	92	0.0607	0.0544	90	2	64	120	40	PR
Ethylbenzene	0	0.0603	0.0604	100	0.0607	0.0618	102	2	72	125	40	PR
Tetrachloroethene	0	0.0603	0.0528	88	0.0607	0.0538	89	1	66	116	40	PR
Toluene	0.00344	0.0603	0.0615	96	0.0607	0.0605	94	2	73	122	40	PR
Trichloroethene	0	0.0603	0.0591	98	0.0607	0.0597	98	0	76	117	40	PR

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MSD : SW8270		MS Sample Name : OT3913SAMS				MSD Sample Name : OT3913SAMSD							
Initial		MS LIMS ID : AA81014				MSD LIMS ID : AA81015							
Extraction : SW3550		MS Extraction : 11/2/95				MSD Extraction : 11/2/95							
Matrix : SO		MS Extraction : 11:05				MSD Extraction : 11:05							
Units : mg/Kg		MS Analysis : 11/12/95				MSD Analysis : 11/12/95							
Net Sample : AA81013		MS Analysis : 08:56				MSD Analysis : 08:50							
Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC	
1,2,4-Trichlorobenzene	0	4.073	2.45	60	4.104	2.33	57	8	44	142	40	PR	
1,4-Dichlorobenzene	0	4.073	2.11	52	4.104	1.99	49	7	20	124	40	PR	
2,4-Dinitrotoluene	0	4.073	2.26	56	4.104	2.31	56	1	47	129	40	PR	
2-Chlorophenol	0	6.11	3.72	61	6.156	3.42	56	9	23	127	40	PR	
4-Chloro-3-methylphenol	0	6.11	4.04	66	6.156	3.94	64	3	39	131	40	PR	
4-Nitrophenol	0	6.11	3.34	55	6.156	3.63	59	8	0	132	40	PR	
Acenaphthene	0	4.073	2.66	65	4.104	2.53	62	6	47	135	40	PR	
Benz(a)anthracene	0	4.073	3.01	74	4.104	2.95	72	3	43	136	40	PR	
Benzo(a)pyrene	0	4.073	3.56	87	4.104	3.59	88	0	17	152	40	PR	
Butyl benzyl phthalate	0	4.073	3.6	88	4.104	3.53	86	3	54	143	40	PR	
Hexachlorobenzene	0	4.073	3.01	74	4.104	3	73	1	42	144	40	PR	
Naphthalene	0	4.073	2.41	59	4.104	2.28	56	6	33	127	40	PR	
Pentachlorophenol	0	6.11	2.63	43	6.156	2.52	41	5	14	155	40	PR	
Phenol	0	6.11	3.49	57	6.156	3.42	56	3	29	112	40	PR	
Pyrene	0	4.073	4.18	103	4.104	4.09	100	3	60	115	40	PR	
bis(2-Chloroethoxy)methane	0	4.073	2.52	62	4.104	2.47	60	3	33	154	40	PR	
n-Nitrosodi-n-propylamine	0	4.073	2.73	67	4.104	2.72	66	1	0	139	40	PR	

MSD : SW8270		MS Sample Name : OT3840SAMS				MSD Sample Name : OT3840SAMSD							
initial		MS LIMS ID : AA81022				MSD LIMS ID : AA81023							
Extraction : SW3550		MS Extraction : 11/2/95				MSD Extraction : 11/2/95							
Matrix : SO		MS Extraction : 11:05				MSD Extraction : 11:05							
Units : mg/Kg		MS Analysis : 11/12/95				MSD Analysis : 11/12/95							
Net Sample : AA81021		MS Analysis : 16:09				MSD Analysis : 17:03							
Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC	
1,2,4-Trichlorobenzene	0	3.676	2.48	68	3.64	2.04	56	19	44	142	40	PR	
1,4-Dichlorobenzene	0	3.676	2.14	58	3.64	1.65	45	25	20	124	40	PR	
2,4-Dinitrotoluene	0	3.676	0.911	25	3.64	0.674	19	29	47	129	40	PR	
2-Chlorophenol	0	5.513	3.73	68	5.46	3.02	55	20	23	127	40	PR	
4-Chloro-3-methylphenol	0	5.513	4.16	76	5.46	3.62	66	13	39	131	40	PR	
4-Nitrophenol	0	5.513	2.49	45	5.46	1.77	32	33	0	132	40	PR	
Acenaphthene	0	3.676	2.53	69	3.64	2.11	58	17	47	135	40	PR	
Benz(a)anthracene	0	3.676	3	82	3.64	2.5	69	17	43	136	40	PR	
Benzo(a)pyrene	0	3.676	3.64	99	3.64	3.09	85	15	17	152	40	PR	
Butyl benzyl phthalate	0	3.676	4.06	110	3.64	3.99	110	0	54	143	40	PR	
Hexachlorobenzene	0	3.676	3.06	83	3.64	2.77	76	9	42	144	40	PR	
Naphthalene	0	3.676	2.46	67	3.64	2.03	56	18	33	127	40	PR	
Pentachlorophenol	0	5.513	2.7	49	5.46	2.26	41	17	14	155	40	PR	
Phenol	0	5.513	3.46	63	5.46	2.86	52	18	29	112	40	PR	
Pyrene	0.0732	3.676	4.88	131	3.64	4.89	132	1	60	115	40	PR	
bis(2-Chloroethoxy)methane	0	3.676	2.61	71	3.64	2.12	58	20	33	154	40	PR	
n-Nitrosodi-n-propylamine	0	3.676	2.68	73	3.64	2.22	61	18	0	139	40	PR	

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MSD : SW8270		MS Sample Name : OT3930SAMS				MSD Sample Name : OT3930SAMSD							
initial		MS LIMS ID : AA81198				MSD LIMS ID : AA81199							
Extraction : SW3550		MS Extraction : 11/5/95				MSD Extraction : 11/5/95							
Matrix : SO		MS Extraction : 17:00				MSD Extraction : 17:00							
Units : mg/Kg		MS Analysis : 11/27/95				MSD Analysis : 11/27/95							
Neat Sample : AA81197		MS Analysis : 16:26				MSD Analysis : 17:21							

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	4.05	2.55	63	3.815	2.77	73	14	44	142	40	PR
1,4-Dichlorobenzene	0	4.05	2.27	56	3.815	2.43	64	13	20	124	40	PR
2,4-Dinitrotoluene	0	4.05	2.74	68	3.815	2.93	77	13	47	129	40	PR
2-Chlorophenol	0	6.076	3.74	62	5.722	3.97	69	12	23	127	40	PR
4-Chloro-3-methylphenol	0	6.076	4.07	67	5.722	4.45	78	15	39	131	40	PR
4-Nitrophenol	0	6.076	5.73	94	5.722	6.37	111	16	0	132	40	PR
Acenaphthene	0	4.05	2.74	68	3.815	2.97	78	14	47	135	40	PR
Benz(a)anthracene	0	4.05	3.04	75	3.815	3.29	86	14	43	136	40	PR
Benzo(a)pyrene	0	4.05	2.26	56	3.815	2.42	63	13	17	152	40	PR
Butyl benzyl phthalate	0.156	4.05	2.88	67	3.815	3.14	78	15	54	143	40	PR
Hexachlorobenzene	0	4.05	3.05	75	3.815	3.27	86	13	42	144	40	PR
Naphthalene	0	4.05	2.56	63	3.815	2.74	72	13	33	127	40	PR
Pentachlorophenol	0	6.076	2.57	42	5.722	2.95	52	20	14	155	40	PR
Phenol	0	6.076	3.56	59	5.722	3.8	66	12	29	112	40	PR
Pyrene	0	4.05	3.15	78	3.815	3.38	89	13	60	115	40	PR
bis(2-Chloroethoxy)methane	0	4.05	2.58	64	3.815	2.94	77	19	33	154	40	PR
n-Nitrosodi-n-propylamine	0	4.05	2.85	70	3.815	3.13	82	15	0	139	40	PR

MSD : SW8270		MS Sample Name : OT3920SAMS				MSD Sample Name : OT3920SAMSD							
initial		MS LIMS ID : AA81211				MSD LIMS ID : AA81212							
Extraction : SW3550		MS Extraction : 11/5/95				MSD Extraction : 11/5/95							
Matrix : SO		MS Extraction : 17:00				MSD Extraction : 17:00							
Units : mg/Kg		MS Analysis : 11/28/95				MSD Analysis : 11/28/95							
Neat Sample : AA81210		MS Analysis : 15:49				MSD Analysis : 16:45							

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
1,2,4-Trichlorobenzene	0	3.97	1.91	48	3.959	1.8	46	6	44	142	40	PR
1,4-Dichlorobenzene	0	3.97	1.62	41	3.959	1.54	39	5	20	124	40	PR
2,4-Dinitrotoluene	0	3.97	1.58	40	3.959	1.4	35	12	47	129	40	PR
2-Chlorophenol	0	5.955	2.73	46	5.939	2.62	44	4	23	127	40	PR
4-Chloro-3-methylphenol	0	5.955	2.87	48	5.939	2.96	50	3	39	131	40	PR
4-Nitrophenol	0	5.955	2.49	42	5.939	3.59	60	36	0	132	40	PR
Acenaphthene	0	3.97	2.19	55	3.959	2.13	54	3	47	135	40	PR
Benz(a)anthracene	0	3.97	2.35	59	3.959	2.37	60	1	43	136	40	PR
Benzo(a)pyrene	0.0419	3.97	2.23	55	3.959	2.06	51	8	17	152	40	PR
Butyl benzyl phthalate	0	3.97	2.81	71	3.959	2.95	75	5	54	143	40	PR
Hexachlorobenzene	0	3.97	2.59	65	3.959	2.52	64	2	42	144	40	PR
Naphthalene	0.0774	3.97	2.1	51	3.959	1.84	45	14	33	127	40	PR
Pentachlorophenol	0	5.955	1.11	19	5.939	0.529	9	70	14	155	40	PR
Phenol	0	5.955	2.68	45	5.939	2.56	43	4	29	112	40	PR
Pyrene	0.0889	3.97	3.41	84	3.959	3.35	82	2	60	115	40	PR
bis(2-Chloroethoxy)methane	0	3.97	1.92	48	3.959	1.77	45	8	33	154	40	PR
n-Nitrosodi-n-propylamine	0	3.97	2.04	51	3.959	1.92	49	6	0	139	40	PR

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National Laboratories - Pensacola

Law Batch ID : PPSB7431

Project Name : CARSWELL SOIL
 Project Number : 11-3517
 SDG Number : 52C81007

Concentration Level : LOW
 Batch Prep Date : 10/27/95
 SDGs Included : 52C81007 53C81027

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3905SA	AA81007	10/23/95	SO	N
OT3918SA	AA81008	10/23/95	SO	N
OT3910SA	AA81009	10/23/95	SO	N
OT3917SA	AA81010	10/23/95	SO	N
FDUP-06	AA81011	10/23/95	SO	FD
OT3911SA	AA81012	10/23/95	SO	N
OT3913SA	AA81013	10/23/95	SO	N
OT3913SAMS	AA81014	10/23/95	SO	MS
OT3913SAMSD	AA81015	10/23/95	SO	SD
PPSB7431	AA81901	10/27/95	SQ	LB
PPSL7431	AA81902	10/27/95	SQ	BS

MSD : SW8080

MS Sample Name : OT3913SAMS

MSD Sample Name : OT3913SAMSD

initial

MS LIMS ID : AA81014

MSD LIMS ID : AA81015

Extraction : SW3550

MS Extraction : 10/27/95

MSD Extraction : 10/27/95

Matrix : SO

MS Extraction : 16:05

MSD Extraction : 16:05

Units : mg/Kg

MS Analysis : 11/18/95

MSD Analysis : 11/18/95

Net Sample : AA81013

MS Analysis : 03:10

MSD Analysis : 03:57

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0	0.0415	0.0428	103	0.0405	0.0422	104	1	32	160	40	PR
AR1016	0	0.415	0.354	85	0.405	0.335	83	3	50	114	40	PR
AR1260	0	0.415	0.408	98	0.405	0.395	97	1	8	127	40	PR
Aldrin	0	0.0186	0.0142	86	0.0162	0.0142	88	2	42	122	40	PR
Dieldrin	0	0.0415	0.039	94	0.0405	0.0388	96	2	40	146	40	PR
Endrin	0	0.0415	0.0295	71	0.0405	0.0311	77	7	33	147	40	PR
Heptachlor	0	0.0166	0.0149	90	0.0162	0.0146	90	0	34	111	40	PR
gamma-BHC (Lindane)	0	0.0166	0.0142	86	0.0162	0.0142	88	2	32	127	40	PR

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MSD : SW8080	MS Sample Name : OT3913SAMS	MSD Sample Name : OT3913SAMSD
2nd column	MS LIMS ID : AA81014	MSD LIMS ID : AA81015
Extraction : SW3550	MS Extraction : 10/27/95	MSD Extraction : 10/27/95
Matrix : SO	MS Extraction : 16:05	MSD Extraction : 16:05
Units : mg/Kg	MS Analysis : 11/18/95	MSD Analysis : 11/18/95
Net Sample : AA81013	MS Analysis : 03:10	MSD Analysis : 03:57

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0	0.0415	0.0555	134	0.0405	0.0572	141	5	32	160	40	2C
AR1016	0	0.415	0.386	93	0.405	0.374	92	1	50	114	40	2C
AR1260	0	0.415	0.335	81	0.405	0.336	83	3	8	127	40	2C
Aldrin	0	0.0166	0.0145	87	0.0162	0.0153	94	8	42	122	40	2C
Dieldrin	0	0.0415	0.0422	102	0.0405	0.0399	98	4	40	146	40	2C
Endrin	0	0.0415	0.0338	82	0.0405	0.032	79	3	33	147	40	2C
Heptachlor	0	0.0166	0.0152	92	0.0162	0.0149	92	0	34	111	40	2C
gamma-BHC (Lindane)	0	0.0166	0.0145	87	0.0162	0.0139	86	2	32	127	40	2C

LCS : SW8080	Sample Name : PPSL7431
initial	LIMS Sample ID : AA81902
Extraction Method : SW3550	Date of Extraction : 10/27/95
Matrix : SQ	Time of Extraction : 16:05
Units : mg/Kg	Date of Analysis : 11/17/95
	Time of Analysis : 10:39

Analyte	LCS Spike	LCS Conc.	LCS %	LCL	UCL	RC
4,4'-DDD	0.0133	0.0113	85	36	141	PR
4,4'-DDE	0.0133	0.0108	81	30	145	PR
4,4'-DDT	0.0133	0.0108	81	32	160	PR
AR1016	0.333	0.202	61	50	114	PR
AR1260	0.333	0.239	72	8	127	PR
Aldrin	0.00667	0.0047	71	42	122	PR
Dieldrin	0.0133	0.0115	86	40	146	PR
Endosulfan I	0.00667	0.00411	62	45	153	PR
Endosulfan II	0.0133	0.0128	96	32	161	PR
Endosulfan sulfate	0.0133	0.00976	73	26	144	PR
Endrin	0.0133	0.0107	80	33	147	PR
Endrin aldehyde	0.0133	0.00965	72	26	172	PR
Heptachlor	0.00667	0.0051	77	34	111	PR
Heptachlor epoxide	0.00667	0.00588	88	37	142	PR
Methoxychlor	0.0667	0.0581	87	31	190	PR
alpha-BHC	0.00667	0.00443	66	37	134	PR
beta-BHC	0.00667	0.00705	106	26	147	PR
delta-BHC	0.00667	0.0042	63	20	140	PR
gamma-BHC (Lindane)	0.00667	0.00476	71	32	127	PR

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National Laboratories - Pensacola**

Law Batch ID : PPSB7459

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/1/95

SDG Number : 57C81197

SDGs Included : 57C81197

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3930SA	AA81197	10/24/95	SO	N
OT3930SAMS	AA81198	10/24/95	SO	MS
OT3930SAMSD	AA81199	10/24/95	SO	SD
OT3909SA	AA81200	10/24/95	SO	N
OT3915SA	AA81201	10/24/95	SO	N
OT3916SA	AA81202	10/24/95	SO	N
OT3908SA	AA81203	10/24/95	SO	N
OT3922SA	AA81204	10/24/95	SO	N
OT3927SA	AA81205	10/24/95	SO	N
OT3929SA	AA81206	10/24/95	SO	N
OT3912SA	AA81207	10/24/95	SO	N
OT3928SA	AA81208	10/24/95	SO	N
FDUP07	AA81209	10/24/95	SO	FD
OT3920SA	AA81210	10/24/95	SO	N
OT3920SAMS	AA81211	10/24/95	SO	MS
OT3920SAMSD	AA81212	10/24/95	SO	SD
OT3926SA	AA81213	10/24/95	SO	N
OT3925SA	AA81214	10/24/95	SO	N
FDUP08	AA81215	10/24/95	SO	FD
OT3914SA	AA81216	10/24/95	SO	N
PPSB7459	AA82360	11/1/95	SQ	LB
PPSL7459	AA82361	11/1/95	SQ	BS

MSD : SW8080

MS Sample Name : OT3930SAMS

MSD Sample Name : OT3930SAMSD

initial

MS LIMS ID : AA81198

MSD LIMS ID : AA81199

Extraction : SW3550

MS Extraction : 11/1/95

MSD Extraction : 11/1/95

Matrix : SO

MS Extraction : 11:45

MSD Extraction : 11:45

Units : mg/Kg

MS Analysis : 11/30/95

MSD Analysis : 11/30/95

Neat Sample : AA81197

MS Analysis : 01:07

MSD Analysis : 01:54

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0	0.0408	0.0378	93	0.0384	0.0369	96	4	32	160	40	PR
AR1016	0	0.408	0.279	68	0.384	0.287	75	9	50	114	40	PR
AR1250	0	0.408	0.34	83	0.384	0.304	79	5	8	127	40	PR
Aldrin	0	0.0163	0.0111	68	0.0154	0.0115	75	10	42	122	40	PR
Dieldrin	0	0.0408	0.0333	82	0.0384	0.0332	86	6	40	146	40	PR
Endrin	0	0.0408	0.0253	62	0.0384	0.0242	63	2	33	147	40	1C
Heptachlor	0	0.0163	0.0127	78	0.0154	0.0128	83	7	34	111	40	PR
gamma-BHC (Lindane)	0	0.0163	0.0112	69	0.0154	0.012	78	13	32	127	40	PR

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National Laboratories - Pensacola**

MSD : SW8080		MS Sample Name : OT3930SAMS				MSD Sample Name : OT3930SAMSD							
2nd column		MS LIMS ID : AA81198				MSD LIMS ID : AA81199							
Extraction : SW3550		MS Extraction : 11/1/95				MSD Extraction : 11/1/95							
Matrix : SO		MS Extraction : 11:45				MSD Extraction : 11:45							
Units : mg/Kg		MS Analysis : 11/30/95				MSD Analysis : 11/30/95							
Neat Sample : AA81197		MS Analysis : 01:07				MSD Analysis : 01:54							

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0	0.0408	0.0384	94	0.0384	0.0375	98	4	32	160	40	2C
AR1016	0	0.408	0.305	75	0.384	0.303	79	5	50	114	40	2C
AR1260	0	0.408	0.299	73	0.384	0.316	82	12	8	127	40	2C
Aldrin	0	0.0163	0.0124	76	0.0154	0.0123	80	5	42	122	40	2C
Dieldrin	0	0.0408	0.0374	92	0.0384	0.0354	92	1	40	146	40	2C
Endrin	0	0.0408	0.0277	68	0.0384	0.0261	68	0	33	147	40	PR
Heptachlor	0	0.0163	0.0132	81	0.0154	0.0129	84	4	34	111	40	2C
gamma-BHC (Lindane)	0	0.0163	0.012	74	0.0154	0.0124	81	9	32	127	40	2C

MSD : SW8080

MS Sample Name : OT3920SAMS

MSD Sample Name : OT3920SAMSD

initial

MS LIMS ID : AA81211

MSD LIMS ID : AA81212

Extraction : SW3550

MS Extraction : 11/1/95

MSD Extraction : 11/1/95

Matrix : SO

MS Extraction : 11:45

MSD Extraction : 11:45

Units : mg/Kg

MS Analysis : 11/30/95

MSD Analysis : 11/30/95

Neat Sample : AA81210

MS Analysis : 02:41

MSD Analysis : 03:28

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0.0134	0.0397	0.0439	77	0.0399	0.0414	70	9	32	160	40	PR
AR1016	0	0.397	0.331	83	0.399	0.298	75	11	50	114	40	PR
AR1260	0	0.397	0.422	106	0.399	0.403	101	5	8	127	40	PR
Aldrin	0	0.0159	0.0124	78	0.016	0.0129	81	3	42	122	40	PR
Dieldrin	0	0.0397	0.0353	89	0.0399	0.034	85	4	40	146	40	PR
Endrin	0	0.0397	0.0287	72	0.0399	0.0263	66	9	33	147	40	1C
Heptachlor	0	0.0159	0.0133	84	0.016	0.0138	86	3	34	111	40	PR
gamma-BHC (Lindane)	0	0.0159	0.012	76	0.016	0.0127	80	5	32	127	40	PR

MSD : SW8080		MS Sample Name : OT3920SAMS				MSD Sample Name : OT3920SAMSD						
2nd column		MS LIMS ID : AA81211				MSD LIMS ID : AA81212						
Extraction : SW3550		MS Extraction : 11/1/95				MSD Extraction : 11/1/95						
Matrix : SO		MS Extraction : 11:45				MSD Extraction : 11:45						
Units : mg/Kg		MS Analysis : 11/30/95				MSD Analysis : 11/30/95						
Neat Sample : AA81210		MS Analysis : 02:41				MSD Analysis : 03:28						

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
4,4'-DDT	0.0134	0.0397	0.0461	82	0.0399	0.0422	72	13	32	160	40	2C
AR1016	0	0.397	0.338	85	0.399	0.319	80	6	50	114	40	2C
AR1260	0	0.397	0.355	89	0.399	0.333	83	7	8	127	40	2C
Aldrin	0	0.0159	0.0148	93	0.016	0.015	94	1	42	122	40	2C
Dieldrin	0	0.0397	0.057	144	0.0399	0.0575	144	0	40	146	40	2C
Endrin	0	0.0397	0.0265	67	0.0399	0.0258	65	3	33	147	40	PR
Heptachlor	0	0.0159	0.0132	83	0.016	0.0138	86	4	34	111	40	2C
gamma-BHC (Lindane)	0	0.0159	0.0117	74	0.016	0.0127	80	8	32	127	40	2C

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HERBSB7430

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 10/27/95

SDG Number : 52C81007

SDGs Included : 81007 81027 81067 81087

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3905SA	AA81007	10/23/95	SO	N
OT3918SA	AA81008	10/23/95	SO	N
OT3910SA	AA81009	10/23/95	SO	N
OT3917SA	AA81010	10/23/95	SO	N
FDUP-06	AA81011	10/23/95	SO	FD
OT3911SA	AA81012	10/23/95	SO	N
OT3913SA	AA81013	10/23/95	SO	N
OT3913SAMS	AA81014	10/23/95	SO	MS
OT3913SAMSD	AA81015	10/23/95	SO	SD
HERBSB7430	AA81463	10/27/95	SQ	LB
HERBSL7430	AA81464	10/27/95	SQ	BS

MSD : SW8150

MS Sample Name : OT3913SAMS

MSD Sample Name : OT3913SAMSD

initial

MS LIMS ID : AA81014

MSD LIMS ID : AA81015

Extraction : METHOD

MS Extraction : 10/27/95

MSD Extraction : 10/27/95

Matrix : SO

MS Extraction : 12:00

MSD Extraction : 12:00

Units : mg/Kg

MS Analysis : 11/18/95

MSD Analysis : 11/18/95

Neat Sample : AA81013

MS Analysis : 21:11

MSD Analysis : 21:47

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
2,4,5-T	0	0.0248	0.0111	45	0.0247	0.0101	41	9	25	122	40	1C
2,4,5-TP (Silvex)	0	0.0248	0.0134	54	0.0247	0.0101	41	27	25	122	40	1C
2,4-D	0	0.248	0.0802	32	0.247	0.0666	27	18	4	143	40	1C

MSD : SW8150

MS Sample Name : OT3913SAMS

MSD Sample Name : OT3913SAMSD

2nd column

MS LIMS ID : AA81014

MSD LIMS ID : AA81015

Extraction : METHOD

MS Extraction : 10/27/95

MSD Extraction : 10/27/95

Matrix : SO

MS Extraction : 12:00

MSD Extraction : 12:00

Units : mg/Kg

MS Analysis : 11/18/95

MSD Analysis : 11/18/95

Neat Sample : AA81013

MS Analysis : 21:11

MSD Analysis : 21:47

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
2,4,5-T	0	0.0248	0.00759	31	0.0247	0.0069	28	9	25	122	40	PR
2,4,5-TP (Silvex)	0	0.0248	0.00992	40	0.0247	0.00991	40	0	25	122	40	PR
2,4-D	0	0.248	0.09	36	0.247	0.0787	32	13	4	143	40	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HERBSB7501

Project Name : CARSWELL SOIL

Concentration Level : LOW

Project Number : 11-3517

Batch Prep Date : 11/7/95

SDG Number : 57C81197

SDGs Included : 57C81197 58C81217

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3930SA	AA81197	10/24/95	SO	N
OT3930SAMS	AA81198	10/24/95	SO	MS
OT3930SAMSD	AA81199	10/24/95	SO	SD
OT3909SA	AA81200	10/24/95	SO	N
OT3915SA	AA81201	10/24/95	SO	N
OT3916SA	AA81202	10/24/95	SO	N
OT3908SA	AA81203	10/24/95	SO	N
OT3922SA	AA81204	10/24/95	SO	N
OT3927SA	AA81205	10/24/95	SO	N
HERBSB7501	AA82362	11/7/95	SQ	LB
HERBSL7501	AA82363	11/7/95	SQ	BS

MSD : SW8150

MS Sample Name : OT3930SAMS

MSD Sample Name : OT3930SAMSD

Initial

MS LIMS ID : AA81198

MSD LIMS ID : AA81199

Extraction : METHOD

MS Extraction : 11/7/95

MSD Extraction : 11/7/95

Matrix : SO

MS Extraction : 08:00

MSD Extraction : 08:00

Units : mg/Kg

MS Analysis : 12/1/95

MSD Analysis : 12/1/95

Net Sample : AA81197

MS Analysis : 17:16

MSD Analysis : 17:52

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RP D CL	RC
2,4,5-T	0	0.0247	0.0101	41	0.0232	0.00957	41	1	24	144	40	PR
2,4,5-TP (Silvex)	0	0.0247	0.0104	42	0.0232	0.0102	44	4	25	122	40	PR
2,4-D	0	0.247	0.0948	38	0.232	0.0877	38	2	4	143	40	PR

**Law Engineering and Environmental Services, Inc.
National Laboratories - Pensacola**

Law Batch ID : HERBSB7460

Project Name : CARSWELL SOIL
Project Number : 11-3517
SDG Number : 57C81197

Concentration Level : LOW
Batch Prep Date : 11/2/95
SDGs Included : 55C81067 57C81197

Samples in Batch

Sample ID	LIMS ID	Sampled	Matrix	SACODE
OT3929SA	AA81206	10/24/95	SO	N
OT3912SA	AA81207	10/24/95	SO	N
OT3928SA	AA81208	10/24/95	SO	N
FDUP07	AA81209	10/24/95	SO	FD
OT3920SA	AA81210	10/24/95	SO	N
OT3920SAMS	AA81211	10/24/95	SO	MS
OT3920SAMSD	AA81212	10/24/95	SO	SD
OT3926SA	AA81213	10/24/95	SO	N
OT3925SA	AA81214	10/24/95	SO	N
FDUP08	AA81215	10/24/95	SO	FD
OT3914SA	AA81216	10/24/95	SO	N
HERBSB7460	AA82350	11/2/95	SQ	LB
HERBSL7460	AA82351	11/2/95	SQ	BS

MSD : SW8150

MS Sample Name : OT3920SAMS

MSD Sample Name : OT3920SAMSD

initial

MS LIMS ID : AA81211

MSD LIMS ID : AA81212

Extraction : METHOD

MS Extraction : 11/2/95

MSD Extraction : 11/2/95

Matrix : SO

MS Extraction : 05:00

MSD Extraction : 05:00

Units : mg/Kg

MS Analysis : 11/14/95

MSD Analysis : 11/14/95

Neat Sample : AA81210

MS Analysis : 13:49

MSD Analysis : 14:23

Analyte	Original Conc	MS Spike	MS Conc.	MS %	MSD Spike	MSD Conc.	MSD %	RPD	LCL	UCL	RPD CL	RC
2,4,5-T	0	0.024	0.00817	34	0.024	0.0082	34	0	24	144	40	PR
2,4,5-TP (Silvex)	0	0.024	0.0107	45	0.024	0.0106	44	1	25	122	40	PR
2,4-D	0	0.24	0.0949	40	0.24	0.094	39	1	4	143	40	PR

TAB

Appendix C

APPENDIX C

ANALYTICAL DATA SUMMARY TABLES

C-1 AEROSPACE MUSEUM SITE

C-2 GROUNDS MAINTENANCE YARD

APPENDIX C-1

AEROSPACE MUSEUM SITE

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3801SA 22-OCT-95 0.0' - 2.0'	OT3802SA 22-OCT-95 0.0' - 2.0'	OT3803SA 22-OCT-95 0.0' - 2.0'	OT3804SA 22-OCT-95 0.0' - 2.0'	OT3805SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)							
623-9045 pH units Soil			7.84	7.73	7.37	7.74	7.32
PERCENT SOLID - D2216 /NONE (percent)							
623-D2216 Moisture			6.00	4.00	17.0	21.0	9.00
METALS, TOTAL BY ICP/SW6010/SW3450 (mg/kg)							
Aluminum	50.0		4190	2640	12900	7950	7130
Antimony	25.0		2.08 IQ	1.72 IQ	<20.6	2.44 IQ	<20.4
Barium	2.00		80.0	89.9	129	122	83.6
Beryllium	0.300		<2.40	<2.25	0.908	0.584	0.570
Cadmium	1.00		<0.800	<0.749	<0.825	<0.974	<0.814
Calcium	10.0		173000	209000	62700	77400	114000
Chromium	5.00		40.8	7.49 IQ	12.0	9.25	11.3
Cobalt	5.00		2.08 IQ	1.42 IQ	5.36	5.55	4.64
Copper	5.00		24.8 IQ	6.74 IQ	8.66	8.28	7.73
Iron	5.00		6880	3690	11400	11600	10500
Magnesium	25.0		1960	2090	2300	1740	1880
Manganese	1.00		370	389	574	526	353
Molybdenum	5.00		1.52 IQ	<3.74	1.98 IQ	2.34	2.04 IQ
Nickel	5.00		214	198	11.0	10.4	8.22
Potassium	60.0		966	614 JH	1880 JH	1450	1520 JH
Silver	5.00		3.36 IQ	<3.74	<4.12	<4.87	<4.07
Sodium	25.0		81.8	58.3 JB	155	94.4	79.7 JB
Thallium	25.0		<20.0	<18.7	<20.6	<24.4	<20.4
Vanadium	5.00		11.8	7.86	28.1	20.6	21.4
Zinc	1.00		127	70.3	29.6	35.7	26.6
ARSENIC, TOTAL BY GFAA/SW 7049 (mg/kg)							
Arsenic	0.500		1.87	1.07	1.73	2.78	1.77
LEAD, TOTAL BY GFAA/SW 7401 (mg/kg)							
Lead	0.500		227	12.6	26.6	33.0	21.0
MERCURY, TOTAL BY CYAA/SW 7471 (mg/kg)							
Mercury	0.242		<0.226	<0.260	<0.265	<0.286	<0.229
SELENIUM, TOTAL BY GFAA/SW 7740/METHOD (mg/kg)							
Selenium	0.500		<0.409 JL	<0.347	<0.456	0.0940 JL	<0.366
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)							
1,1,1-Trichloroethane	0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561
1,1,2,2-Tetrachloroethane	0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561
1,1,2-Trichloroethane	0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561
1,1-Dichloroethane	0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561
1,1-Dichloroethene	0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)																		
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8746/NONE (mg/kg) cont'd.																		
Quantitation Limits	Sample ID :	OT3801SA	OT3802SA	OT3803SA	OT3804SA	OT3805SA												
	Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95												
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'												
	Notes :																	
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.0100		<0.0106	<0.0114	<0.0121	<0.0129	<0.0112												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	<0.00604	<0.00643	<0.00561												
0.00500		<0.00528	<0.00572	&														

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DATA SUMMARY TABLE

**Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas**

PARAMETER/METHOD(UNITS)						
Sample ID :	OT3801SA	OT3802SA	OT3803SA	OT3804SA	OT3805SA	
Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	
Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
Notes :						
Quantitation Limits						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW1559 (mwf/bd conf'd)						
0.333	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
2,2,6-Dinitrotoluene	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
2-Chloroaniline	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
2-Chlorophenol	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
2-Methylphenol	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
2-Nitroaniline	< 17.6	< 1.73	< 2.00	< 2.09	< 1.80	
2-Nitrophenol	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
3,3'-Dichlorobenzidine	< 7.03	< 0.693 J	< 0.799 J	< 0.834 J	< 0.721 J	
3-Nitroaniline	< 17.6	< 1.73	< 2.00	< 2.09	< 1.80	
4,6-Dinitro-2-methylphenol	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
4-Bromophenyl phenyl ether	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
4-Chloro-3-methylphenol	< 7.03 J	< 0.693 J	< 0.799	< 0.834 J	< 0.721 J	
4-Chloroaniline	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
4-Chlorophenyl phenyl ether	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
4-Methylphenol	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
4-Nitroaniline	< 17.6	< 1.73	< 2.00	< 2.09	< 1.80	
4-Nitrophenol	< 17.6	< 1.73	< 2.00	< 2.09	< 1.80	
Acenaphthene	1.40 JQ	< 0.347	< 0.399	< 0.417	< 0.361	
Acenaphthylene	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Anthracene	2.24 JQ	< 0.347	< 0.399	< 0.417	< 0.361	
Benzo(a)anthracene	3.60	0.0395 J	< 0.399	< 0.417	< 0.361	
Benzo(a)pyrene	2.37 JQ	< 0.347 J	< 0.399	< 0.417	< 0.361	
Benzo(b)fluoranthene	4.81	0.0322 J	< 0.399	< 0.417	< 0.361	
Benzo(g,h,i)perylene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Benzo(k)fluoranthene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Benzo(e)anthracene	< 17.6	< 1.73	< 2.00	< 2.09	< 1.80	
Benzo(f)anthracene	< 7.03	< 0.693	< 0.799	< 0.834	< 0.721	
Benzo(i)anthracene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Butyl benzyl phthalate	3.32 JQ	0.0458 J	< 0.399	< 0.417	< 0.361	
Chrysene	< 51	< 0.347	< 0.399	0.0266 JQ	< 0.361	
Di-n-butylphthalate	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Di-n-octylphthalate	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Dibenz(a,h)anthracene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Dibenzofuran	1.04 JQ	< 0.347	< 0.399	< 0.417	< 0.361	
Diethylphthalate	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Dimethylphthalate	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Fluoranthene	7.89 JQ	0.0565 JQ	< 0.399	0.103 JQ	< 0.361	
Fluorene	1.06 JQ	< 0.347	< 0.399	< 0.417	< 0.361	
Hexachlorobenzene	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Hexachlorobutadiene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Hexachlorocyclopentadiene	< 51	< 0.347 J	< 0.399	< 0.417 J	< 0.361	
Hexachloroethane	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Indeno(1,2,3-cd)pyrene	< 51	< 0.347 J	< 0.399	< 0.417	< 0.361	
Isophorone	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Naphthalene	1.09 JQ	< 0.347	< 0.399	< 0.417	< 0.361	
Nitrobenzene	< 51	< 0.347	< 0.399	< 0.417	< 0.361	
Pentachlorophenol	< 10.6	< 1.04	< 1.20	< 1.25	< 1.08	
Phenanthrene	10.1	0.0551 JQ	< 0.399	< 0.417	< 0.361	

TABLE C-1

DATA SUMMARY TABLE

Arespace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)							
Quantitation Limits	Sample ID :		OT3802SA 22-OCT-95 0.0' - 2.0'	OT3803SA 22-OCT-95 0.0' - 2.0'	OT3804SA 22-OCT-95 0.0' - 2.0'	OT3805SA 22-OCT-95 0.0' - 2.0'	
	Sample Data :	Depth :					
	Notes :						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8170SW3550 (mg/kg) cont'd.							
0.333	Phenol	<3.51	<0.347	<0.399	<0.417	<0.361	
0.333	Pyrene	8.54	0.147 J	<0.399	0.121 JQ	<0.361	
0.333	bis(2-Chloroethoxy)methane	<3.51	<0.347	<0.399	<0.417	<0.361	
0.333	bis(2-Chloroethyl)ether	<3.51	<0.347	<0.399	<0.417	<0.361	
0.333	bis(2-Chloroisopropyl)ether	<3.51 IL	<0.347 IL	<0.399 IL	<0.417 IL	<0.361 IL	
0.333	bis(2-Ethylhexyl)phthalate	<3.51	0.302 J	<0.399	1.09	<0.361	
0.333	n-Nitrosodi-n-propylamine	<3.51	<0.347	<0.399	<0.417	<0.361	
0.333	n-Nitrosodiphenylamine	<3.51	<0.347	<0.399	<0.417	<0.361	
% Surrogate Recovery (Control Limit)							
-	sur-2,4,6-Tribromophenol R% (19 - 122)	22.1	78.1	65.9	55.0	66.0	
-	sur-2-Fluorobiphenyl R% (30 - 115)	63.1	76.9	79.9	65.0	67.0	
-	sur-2-Fluorophenol R% (25 - 121)	61.0	61.0	66.9	46.0	56.9	
-	sur-Nitrobenzene-d5 R% (23 - 120)	23.0	66.0	64.2	52.0	54.8	
-	sur-Phenol-d6 R% (24 - 113)	22.1	64.0	63.9	61.0	56.0	
-	sur-Terphenyl-d14 R% (18 - 137)	69.1	122.8	85.0	94.0	75.1	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation based upon blank data
JH = Estimated quantitation: possibly biased high or a false positive based upon blank data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3806SA 22-OCT-95 0.0' - 2.0'	OT3807SA 22-OCT-95 0.0' - 2.0'	OT3808SA 22-OCT-95 0.0' - 2.0'	OT3809SA 22-OCT-95 0.0' - 2.0'	OT3810SA 22-OCT-95 0.0' - 2.0'	OT3811SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (pH)								
623-9045 pH units Soil	-		7.54	7.50	7.55	7.42	7.33	7.45
PERCENT SOLID - D2116 /NONE (percent)								
623-D2116 Moisture	-		9.00	15.0	14.0	10.0	11.0	11.0
METALS TOTAL BY ICPS/SW6018/SW3959 (mg/kg)								
Aluminum	50.0		3320	7490	11700	6230	8970	8120
Antimony	25.0		2.47 IQ	<22.6	<22.2	1.69 IQ	<20.4	<20.4
Barium	2.00		83.8	112	118	78.1	104	115
Beryllium	0.300		<2.24	0.724	0.799	<2.30	0.651	0.570
Cadmium	1.00		0.972	<0.905	<0.888	0.843	<0.814	<0.814
Calcium	10.0		195000	55000	48700	140000	82500	98100 J
Chromium	5.00		18.7 IQ	10.9	10.4	13.0 IQ	9.12	8.95
Cobalt	5.00		2.09 IQ	4.89	3.91 IQ	2.76 IQ	7.49	4.64
Copper	5.00		15.7 IQ	7.87	9.15	6.89 IQ	7.98	7.00
Iron	5.00		4870	8710	7400	6680	10300	7440
Magnesium	25.0		2040	2200	2160	1990	2140	2190
Manganese	1.00		435	422	291	351	572	457
Molybdenum	5.00		<3.74	1.81 IQ	<4.44	2.22 IQ	1.79 IQ	<4.07
Nickel	5.00		198	10.5	8.97	205	9.28	8.79 J
Potassium	60.0		980 JH	1570 JH	1710	1370 JH	1790 JH	1530 JH
Silver	5.00		<3.74	<4.52	<4.44	<3.83	<4.07	<4.07
Sodium	25.0		52.7 JB	277	134	62.5 JB	97.8 JB	61.3 JB
Thallium	25.0		<18.7	<22.6	<22.2	<19.2	<20.4	<20.4
Vanadium	5.00		9.42	25.6	21.0	17.2	17.6	19.5
Zinc	1.00		83.0	27.1	25.4	81.2	31.2	21.2 J
ARSENIC TOTAL BY GFAS/SW 7049 (mg/kg)								
Arsenic	0.500		1.61	1.65	3.00	1.95	2.04	2.05
LEAD TOTAL BY GFAS/SW 7421 (mg/kg)								
Lead	0.500		26.3	49.4	25.4	19.1	19.0	17.0
MERCURY TOTAL BY CVAA/SW 7471 (mg/kg)								
Mercury	0.242		<0.249	<0.273	<0.266	<0.204	<0.249	<0.264
SELENIUM TOTAL BY GFAS/SW 7749/METHOD (mg/kg)								
Selenium	0.500		<0.413	<0.355	<0.424 JL	<1.89	<0.407	<0.416
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW2149/NONE (mg/kg)								
1,1,1-Trichloroethane	0.00500		<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571
1,1,2,2-Tetrachloroethane	0.00500		<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571
1,1,2-Trichloroethane	0.00500		<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571
1,1-Dichloroethane	0.00500		<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571
1,1-Dichloroethene	0.00500		<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Jett Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)																
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7246/NONE (mg/kg,cont'd)																
Sample ID :	OT3806SA	OT3807SA	OT3808SA	OT3809SA	OT3810SA	OT3811SA										
Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95										
Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'										
Notes :																
Quantitation Limits																
1,2-Dichloroethane	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
1,2-Dichloropropane	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
2-Butanone (MEK)	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
2-Chloroethyl vinyl ether	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
2-Hexanone	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
4-Methyl-2-pentanone	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Acetone	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Benzene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Bromodichloromethane	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Bromoform	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Bromomethane	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Carbon disulfide	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Carbon tetrachloride	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Chlorobenzene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Chloroethane	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Chloroform	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Chloromethane	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Dibromochloromethane	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Ethylbenzene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Methylene chloride	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Styrene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Tetrachloroethene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Toluene	0.00500	<0.00578	0.00261	<0.00584	<0.00579	0.00133	<0.00571									
Trichloroethene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
Vinyl acetate	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Vinyl chloride	0.0100	<0.0116	<0.0119	<0.0117	<0.0116	<0.0121	<0.0114									
Xylenes (total)	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
cis-1,2-Dichloroethene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
cis-1,3-Dichloropropene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
trans-1,2-Dichloroethene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
trans-1,3-Dichloropropene	0.00500	<0.00578	<0.00593	<0.00584	<0.00579	<0.00605	<0.00571									
% Sentryle Reservoir (Central Limit)																
ac-1,2-Dichloroethene-44	R% (70 - 121)	104.0	101.0	103.9	110.0	105.0	107.0									
ac-Bromofluorobenzene	R% (74 - 121)	92.0	92.9	92.0	92.1	88.9	87.0									
ac-Toluene-48	R% (81 - 117)	105.0	101.0	96.9	98.1	99.0	101.1									
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7270/SW3550 (mg/kg)																
1,2,4-Trichlorobenzene	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
1,2-Dichlorobenzene	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
1,3-Dichlorobenzene	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
1,4-Dichlorobenzene	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
2,4,5-Trichlorophenol	0.667	<0.723	<0.777	<0.769	<0.734	<0.739	<0.743									
2,4,6-Trichlorophenol	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
2,4-Dichlorophenol	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
2,4-Dimethylphenol	0.333	<0.361	<0.388	<0.384	<0.367	<0.369	<0.371									
2,4-Dinitrophenol	1.67	<1.81	<1.94	<1.92	<1.84	<1.85	<1.86									

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID:			
		Sample Date	Sample Date	Sample Date	Sample Date
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		Depth:	Depth:	Depth:	Depth:
		Notes:	Notes:	Notes:	Notes:
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8260SW1350 (mug/kg) conc'd.					
2,6-Dinitrotoluene	0.333	<0.361	<0.388	<0.384	<0.369
2-Chloronaphthalene	0.333	<0.361	<0.388	<0.367	<0.371
2-Chlorophenol	0.333	<0.361	<0.388	<0.367	<0.369
2-Methylnaphthalene	0.333	<0.361	<0.388	<0.367	<0.371
2-Methylphenol	0.333	<0.361	<0.388	<0.367	<0.369
2-Nitroaniline	1.67	<1.81	<1.94	<1.84	<1.85
2-Nitrophenol	0.333	<0.361	<0.388	<0.367	<0.371
3,3'-Dichlorobenzidine	0.667	<0.723	<0.777	<0.734	<0.739
3-Nitroaniline	1.67	<1.81	<1.94	<1.84	<1.85
4,6-Dinitro-2-methylphenol	1.67	<1.81	<1.94	<1.84	<1.85
4-Bromophenyl phenyl ether	0.333	<0.361	<0.388	<0.367	<0.371
4-Chloro-3-methylphenol	0.333	<0.361	<0.388	<0.367	<0.369
4-Chloroaniline	0.667	<0.723	<0.777	<0.734	<0.739
4-Chlorophenyl phenyl ether	0.333	<0.361	<0.388	<0.367	<0.371
4-Methylphenol	0.333	<0.361	<0.388	<0.367	<0.369
4-Nitroaniline	1.67	<1.81	<1.94	<1.84	<1.85
4-Nitrophenol	1.67	<1.81	<1.94	<1.84	<1.85
Acenaphthene	0.333	<0.361	<0.388	<0.367	<0.371
Acenaphthylene	0.333	<0.361	<0.388	<0.367	<0.369
Anthracene	0.333	<0.361	<0.388	<0.367	<0.369
Benzo(b)anthracene	0.333	<0.361	<0.388	<0.367	<0.371
Benzo(a)pyrene	0.333	<0.361	<0.388	<0.367	<0.371
Benzo(b)fluoranthene	0.333	<0.361	<0.388	<0.367	<0.371
Benzo(g,h,i)perylene	0.333	<0.361	<0.388	<0.367	<0.371
Benzo(k)fluoranthene	0.333	<0.361	<0.388	<0.367	<0.371
Benzoic acid	1.67	<1.81	<1.94	<1.84	<1.85
Benzyl alcohol	0.667	<0.723	<0.777	<0.734	<0.739
Benzyl benzyl phthalate	0.333	<0.361	<0.388	<0.367	<0.371
Chrysene	0.333	<0.361	<0.388	<0.367	<0.371
Di-n-butylphthalate	0.333	<0.361	<0.388	<0.367	<0.371
Di-n-octylphthalate	0.333	<0.361	<0.388	<0.367	<0.371
Dibenz(a,h)anthracene	0.333	<0.361	<0.388	<0.367	<0.371
Dibenzofuran	0.333	<0.361	<0.388	<0.367	<0.371
Diethylphthalate	0.333	<0.361	<0.388	<0.367	<0.371
Dimethylphthalate	0.333	<0.361	<0.388	<0.367	<0.371
Fluorene	0.333	<0.361	<0.388	<0.367	<0.371
Hexachlorobenzene	0.333	<0.361	<0.388	<0.367	<0.371
Hexachlorobutadiene	0.333	<0.361	<0.388	<0.367	<0.371
Hexachlorocyclopentadiene	0.333	<0.361	<0.388	<0.367	<0.371
Hexachloroethane	0.333	<0.361	<0.388	<0.367	<0.371
Indeno(1,2,3-cd)pyrene	0.333	<0.361	<0.388	<0.367	<0.371
Isophthalate	0.333	<0.361	<0.388	<0.367	<0.371
Naphthalene	0.333	<0.361	<0.388	<0.367	<0.371
Nitrobenzene	0.333	<0.361	<0.388	<0.367	<0.371
Pentachlorophenol	1.00	<1.08	<1.15	<1.10	<1.11
Phenanthrene	0.333	0.0426 IQ	<0.388	<0.367	0.0935 IQ

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :		OT3806SA 22-OCT-95 0.0' - 2.0'	OT3807SA 22-OCT-95 0.0' - 2.0'	OT3808SA 22-OCT-95 0.0' - 2.0'	OT3809SA 22-OCT-95 0.0' - 2.0'	OT3810SA 22-OCT-95 0.0' - 2.0'	OT3811SA 22-OCT-95 0.0' - 2.0'	
		Sample Date :	Depth :							
		Notes :								
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (modified cont'd)										
Phenol	0.333			<0.361	<0.388	<0.384	<0.367	<0.369	<0.371	
Pyrene	0.333			0.0604 IQ	<0.388	<0.384	<0.367 J	0.0864 IQ	<0.371	
ben(2-Chloroethoxy)methane	0.333			<0.361	<0.388	<0.384	<0.367	<0.369	<0.371	
ben(2-Chloroethyl)ether	0.333			<0.361	<0.388	<0.384	<0.367 IL	<0.369 IL	<0.371 IL	
ben(2-Chloroisopropyl)ether	0.333			<0.361 IL	<0.388 IL	<0.384 IL	<0.367 J	<0.369 J	<0.371	
ben(2-Ethylhexyl)phthalate	0.333			0.198 IQ	<0.388	<0.384	<0.367	<0.369	<0.371	
n-Nitrosodi-n-propylamine	0.333			<0.361	<0.388	<0.384	<0.367	<0.369	<0.371	
n-Nitrosodiphenylamine	0.333			<0.361	<0.388	<0.384	<0.367	<0.369	<0.371	
% Surrogate Recovery (Control Limit)										
sur-2,4,6-Trichlorophenol R% (19 - 122)	-			92.1	71.0	51.0	51.9	50.0	65.0	
sur-2-Fluorobiphenyl R% (30 - 115)	-			88.1	72.9	59.1	65.1	75.1	78.2	
sur-2-Fluorophenol R% (25 - 121)	-			76.9	64.1	42.0	55.0	57.0	61.9	
sur-Nitrobenzene-d5 R% (23 - 120)	-			82.0	63.1	46.1	53.1	56.1	65.0	
sur-Phenol-d6 R% (24 - 113)	-			83.9	60.0	51.0	51.0	57.0	61.0	
sur-Terphenyl-d14 R% (18 - 137)	-			115.2	82.0	85.2	95.9	87.0	81.1	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 IL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 IQ = Estimated quantitation: detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data: do not use.

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS	Quantitation Limits	Sample ID: Sample Date: Depth: Notes: Duplicate of OT3811SA	OT3812SA 22-OCT-95 0.0' - 2.0'	OT3813SA 22-OCT-95 0.0' - 2.0'	OT3814SA 22-OCT-95 0.0' - 2.0'	OT3815SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none) 623-9045 pH Unit Soil						
PERCENT SOLID - D2216/NONE (percent) 623-D2216 Moisture		7.49	7.29	7.23	7.46	7.56
METALS, TOTAL BY ICP/SW6910/SW7050 (mg/kg)		12.0	15.0	14.0	10.0	11.0
Aluminum	50.0	7620	4740	7970	6900	6770
Antimony	25.0	<1.4	<21.5	<21.1	1.87 JQ	<1.4 JL
Barium	2.00	116	55.0	90.3	79.5	139
Beryllium	0.300	<2.56	0.344	0.506	0.487	<2.57
Cadmium	1.00	<0.854	<0.859	<0.843	<0.811	<0.858 JL
Calcium	10.0	140000 J	58800	74300	82100	184000
Chromium	5.00	12.0 JQ	6.87	7.67	14.6	19.7 J
Cobalt	5.00	3.07 JQ	3.01 JQ	3.37 JQ	3.73 JQ	4.12 JQ
Copper	5.00	9.39 JQ	4.81	5.82	7.62	11.2 JL
Iron	5.00	7590	7030	7980	10200	2090
Magnesium	5.00	2310	1280	1620	1500	8050
Manganese	25.0	479	303	224	255	631
Molybdenum	5.00	<4.27	1.63 JQ	1.35 JQ	1.78 JQ	<4.29
Nickel	5.00	229 J	6.36	8.43	8.76	229
Potassium	60.0	1540 JH	1160 JH	1210 JH	1330 JH	1200 JH
Silver	5.00	<4.27	<4.30	<4.22	0.568 JQ	<4.29
Sodium	25.0	68.9 JB	110 JB	69.8 JB	60.7 JB	87.5 JB
Thallium	25.0	<21.4	<21.5	<21.1	<20.3	<21.4
Vanadium	5.00	17.5	13.2	17.4	20.4	23.7
Zinc	1.00	83.9 J	19.2	21.9	25.5	79.5
ARSENIC, TOTAL BY GF/AA/SW 7040 (mg/kg)	0.500	2.47	1.94	1.96	2.16	1.88 JL
Arsenic						
LEAD, TOTAL BY GF/AA/SW 7431 (mg/kg)	0.500	19.8	32.9	21.9	42.8	15.4
Lead						
MERCURY, TOTAL BY CV/AA/SW 7471 (mg/kg)	0.242	<0.261	<0.234	<0.250	<0.211	<0.199
Mercury						
SELENIUM, TOTAL BY GF/AA/SW 7740/METHOD (mg/kg)	0.500	<0.414	<0.439 JL	<0.418	<0.400	<0.420 JL
Selenium						
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500	<0.00574	<0.00554	<0.00586	<0.00554	<0.00563
1,1,2,2-Tetrachloroethane	0.00500	<0.00574	<0.00554	<0.00586	<0.00554	<0.00563
1,1,2-Trichloroethane	0.00500	<0.00574	<0.00554	<0.00586	<0.00554	<0.00563
1,1-Dichloroethane	0.00500	<0.00574	<0.00554	<0.00586	<0.00554	<0.00563
1,1-Dichloroethane	0.00500	<0.00574	<0.00554	<0.00586	<0.00554	<0.00563

DATA SUMMARY TABLE
Arespace Museum Site
Naval Air Station Fort Worth Jodel Reserve Base, Carswell Field
Fort Worth, Texas

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DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes : Duplicate of OT3811SA	FDUP-01 22-OCT-95 0.0' - 2.0'	OT3812SA 22-OCT-95 0.0' - 2.0'	OT3813SA 22-OCT-95 0.0' - 2.0'	OT3814SA 22-OCT-95 0.0' - 2.0'	OT3815SA 22-OCT-95 0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW81705W3550 (method cont'd)							
2,6-Dinitrotoluene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
2-Chloronaphthalene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
2-Chlorophenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
2-Methylnaphthalene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
2-Methylphenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
2-Nitroaniline	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
2-Nitrophenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
3,3'-Dichlorobenzidine	0.667		<0.752 J	<0.773 J	<3.87 J	<0.756 J	<0.747 J
3-Nitroaniline	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
4,6-Dinitro-2-methylphenol	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
4-Bromophenyl phenyl ether	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
4-Chloro-3-methylphenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
4-Chloroaniline	0.667		<0.752	<0.773	<3.87	<0.756	<0.747
4-Chlorophenyl phenyl ether	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
4-Methylphenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
4-Nitroaniline	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
4-Nitrophenol	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
Acenaphthene	0.333		<0.376	<0.386	<1.93	0.0401 IQ	<0.374
Acenaphthylene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Anthracene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Benzo(a)anthracene	0.333		<0.376	<0.386	<1.93 J	0.407	<0.374
Benzo(b)fluoranthene	0.333		<0.376	<0.386	<1.93 J	0.471	<0.374
Benzo(g,h,i)perylene	0.333		<0.376	<0.386	<1.93 J	0.658	<0.374
Benzo(k)fluoranthene	0.333		<0.376	<0.386	<1.93 J	0.166 IQ	<0.374
Benzoic acid	0.333		<0.376	<0.386	<1.93 J	0.359 IQ	<0.374
Benzyl alcohol	1.67		<1.88	<1.93	<1.93	<1.84	<1.87
Butyl benzyl phthalate	0.667		<0.752	<0.773	<3.87	<0.756	<0.747
Chrysene	0.333		<0.376	<0.386	<1.93 J	<0.368	<0.374
Di-n-butylphthalate	0.333		0.0131 IQ	<0.386	<1.93 J	0.834	<0.374
Di-n-octylphthalate	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Dibenz(a,h)anthracene	0.333		<0.376	<0.386	<1.93 J	<0.368	<0.374
Dibenzofuran	0.333		<0.376	<0.386	<1.93 J	0.0765 IQ	<0.374
Diethylphthalate	0.333		<0.376	<0.386	<1.93	0.0328 IQ	<0.374
Dimethylphthalate	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Fluoranthene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Fluorene	0.333		0.0212 IQ	0.0137 IQ	<1.93	1.26	<0.374
Hexachlorobenzene	0.333		<0.376	<0.386	<1.93	0.0181 IQ	<0.374
Hexachlorobutadiene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Hexachlorocyclopentadiene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Hexachloroethane	0.333		<0.376	<0.386 J	<1.93 J	<0.368 J	<0.374 J
Indeno(1,2,3-cd)pyrene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Isophorone	0.333		<0.376	<0.386	<1.93 J	0.256 IQ	<0.374
Naphthalene	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Nitrobenzene	0.333		<0.376	<0.386	<1.93	0.0270 IQ	<0.374
Pentachlorophenol	0.333		<0.376	<0.386	<1.93	<0.368	<0.374
Phenanthrene	1.00		<1.13	<1.16	<5.80	<1.10	<1.12
	0.333		<0.376	<0.386	<1.93	1.13	<0.374

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Jett Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)							
Quantitation Limits	Sample ID :	FDUP-01	OT3812SA	OT3813SA	OT3814SA	OT3815SA	
	Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
Notes : Duplicate of OT3811SA							
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW2550 (ms/ks) cont'd.							
Phenol	0.333	<0.376	<0.386	<1.93	<0.368	<0.374	
Pyrene	0.333	0.0251 IQ	0.0207 IQ	<1.93 J	1.25	<0.374	
bis(2-Chloroethoxy)acetone	0.333	<0.376	<0.386	<1.93	<0.368	<0.374	
bis(2-Chloroethoxy)ether	0.333	<0.376	<0.386	<1.93	<0.368	<0.374	
bis(2-Chloroisopropyl)ether	0.333	<0.376 JL	<0.386 JL	<1.93 JL	<0.368 JL	<0.374 JL	
bis(2-Ethylhexyl)phthalate	0.333	<0.376	<0.386	<1.93 J	<0.368	<0.374	
n-Nitrodi-n-propylamine	0.333	<0.376	<0.386	<1.93	<0.368	<0.374	
n-Nitrodiethylamine	0.333	<0.376	<0.386	<1.93	<0.368	<0.374	
% Surrogate Recovery (Control Limit)							
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	59.0	54.1	51.0	55.1	56.1	
sur-2-Fluorobiphenyl R% (30 - 115)	-	69.9	70.2	70.0	75.0	81.2	
sur-2-Fluorophenol R% (25 - 121)	-	58.0	61.1	49.0	59.1	65.0	
sur-Nitrobenzene-d5 R% (23 - 120)	-	63.0	56.0	56.8	59.0	70.2	
sur-Phenol-d6 R% (24 - 113)	-	56.9	55.1	70.0	56.0	60.0	
sur-Terphenyl-d14 R% (18 - 137)	-	91.0	87.0	111.9	89.9	85.0	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data: do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD/UNIT	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3816SA 22-OCT-95 0.0' - 2.0'	OT3818SA 22-OCT-95 0.0' - 2.0'	OT3819SA 22-OCT-95 0.0' - 2.0'	OT3820SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)						
623-9045 pH units Soil	-		7.35	8.18	7.54	7.27
PERCENT SOLID - D2116 /NONE (percent)						
623-D2216 Moisture	-		12.0	3.00	18.0	14.0
METALS TOTAL BY ICP/MSW6016/SW3850 (mg/L)						
Aluminum	50.0		4100	1210	7710	14200
Antimony	25.0		<20.2	<19.1	2.08 JQ	1.95 JL
Barium	2.00		58.1	98.6	111	119
Beryllium	0.300		0.242	<2.29	0.606	0.799
Cadmium	1.00		<0.806	<0.764	<0.865	<0.888 JL
Calcium	10.0		85800	285000	61900	72600
Chromium	5.00		4.84	<38.2	13.4 JQ	9.17
Cobalt	5.00		2.74 JQ	0.993 JQ	3.56 JQ	4.24 JQ
Copper	5.00		6.13	3.82 JQ	6.33 JQ	8.61
Iron	5.00		6000	2680	8360	11900
Magnesium	25.0		1320	2020	1460	2240
Manganese	1.00		290	355	428	374
Molybdenum	5.00		<4.03	<3.82	<3.96	1.64 JQ
Nickel	5.00		5.88	200	8.30	9.15
Potassium	60.0		1080 JH	299	1300	2030
Silver	5.00		<4.03	<3.82	<4.32	<4.44
Sodium	25.0		43.4 JB	59.3	65.3	59.4
Thallium	25.0		<20.2	<19.1	<21.6	<22.2
Vanadium	5.00		13.3	3.29 JQ	20.6	21.8
Zinc	1.00		25.3	61.3	16.6	27.8
ARSENIC TOTAL BY GFAA/SW 7060 (mg/L)						
Arsenic	0.500		1.57	0.844	1.42	2.21 JL
LEAD TOTAL BY GFAA/SW 7431 (mg/L)						
Lead	0.500		52.2	3.95	13.0	27.7
MERCURY TOTAL BY CVA/MSW 7471 (mg/L)						
Mercury	0.242		<0.264	<0.240	<0.274	<0.252
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/L)						
Selenium	0.500		<0.427 JL	<0.371 JL	0.108 JL	<0.430 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/L)						
1,1,1-Trichloroethane	0.00500		<0.00586	<0.00512	<0.00628	<0.00569
1,1,2,2-Tetrachloroethane	0.00500		<0.00586	<0.00512	<0.00628	<0.00569
1,1,2-Trichloroethane	0.00500		<0.00586	<0.00512	<0.00628	<0.00569
1,1-Dichloroethane	0.00500		<0.00586	<0.00512	<0.00628	<0.00569
1,1-Dichloroethane	0.00500		<0.00586	<0.00512	<0.00628	<0.00569

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)															
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg) cont'd.															
Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3816SA 22-OCT-95 0.0' - 2.0'	OT3817SA 22-OCT-95 0.0' - 2.0'	OT3818SA 22-OCT-95 0.0' - 2.0'	OT3819SA 22-OCT-95 0.0' - 2.0'	OT3820SA 22-OCT-95 0.0' - 2.0'									
0.00500		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
1,2-Dichlorobenzene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
1,2-Dichloropropane		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
2-Butanone (MEK)		<0.0117 J	<0.0102 R	<0.0114 R	<0.0126 R	<0.0114 R									
2-Chloroethyl vinyl ether		<0.0117	<0.0102 J	<0.0114 J	<0.0126 J	<0.0114 J									
2-Hexanone		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
4-Methyl-2-pentanone		<0.0117	<0.0102 J	<0.0114 J	<0.0126 J	<0.0114 J									
Acetone		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Benzene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Bromodichloromethane		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Bromoform		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Bromomethane		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
Carbon disulfide		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Carbon tetrachloride		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Chlorobenzene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Chloroethane		<0.0117 J	<0.0102 J	<0.0114 J	<0.0126 J	<0.0114 J									
Chloroform		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Chloromethane		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
Dibromochloromethane		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Ethylbenzene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Methylene chloride		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Styrene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Tetrachloroethene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Toluene		<0.00586	0.00203 JQ	<0.00568	0.00115 JQ	<0.00569									
Trichloroethene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
Vinyl acetate		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
Vinyl chloride		<0.0117	<0.0102	<0.0114	<0.0126	<0.0114									
Xylenes (total)		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
cis-1,2-Dichloroethene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
cis-1,3-Dichloropropene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
trans-1,2-Dichloroethene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									
trans-1,3-Dichloropropene		<0.00586	<0.00512	<0.00568	<0.00628	<0.00569									

% Surrogate Recovery (Control Limit)

sur-1,2-Dichloroethane-4% (70 - 121)

sur-Bromofluorobenzene R% (74 - 121)

sur-Toluene-8% (81 - 117)

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3559 (mg/kg)

1,2,4-Trichlorobenzene	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
1,2-Dichlorobenzene	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
1,3-Dichlorobenzene	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
1,4-Dichlorobenzene	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
2,4,5-Trichlorophenol	0.667	<0.755	<0.683	<0.744	<0.803	<0.765
2,4,6-Trichlorophenol	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
2,4-Dichlorophenol	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
2,4-Dimethylphenol	0.333	<0.377	<0.342	<0.372	<0.401	<0.383
2,4-Dinitrophenol	1.67	<1.89 J	<1.71 J	<1.86 J	<2.01 J	<1.91 J

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :			
		OT3816SA	OT3817SA	OT3818SA	OT3819SA
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
		Notes :			
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW1650 (msdnet.com)'d.					
2,6-Dinitrotoluene	0.333	<0.377	<0.342	<0.372	<0.383
2-Chloromethylthiophene	0.333	<0.377	<0.342	<0.372	<0.383
2-Chlorophenol	0.333	<0.377	<0.342	<0.372	<0.383
2-Methylnaphthalene	0.333	<0.377	<0.342	<0.372	<0.383
2-Methylphenol	0.333	<0.377	<0.342	<0.372	<0.383
2-Nitroaniline	1.67	<1.89	<1.71	<1.86	<1.91
2-Nitrophenol	0.333	<0.377	<0.342	<0.372	<0.383
3,3'-Dichlorobenzidine	0.667	<0.755 J	<0.683	<0.744	<0.765
3-Nitroaniline	1.67	<1.89	<1.71	<1.86	<1.91
4,6-Dinitro-2-methylphenol	0.333	<0.377	<0.342	<0.372	<0.383
4-Bromophenyl phenyl ether	0.333	<0.377	<0.342	<0.372	<0.383
4-Chloro-3-methylphenol	0.667	<0.755	<0.683 J	<0.744 J	<0.765 J
4-Chloroaniline	0.333	<0.377	<0.342	<0.372	<0.383
4-Chlorophenyl phenyl ether	0.333	<0.377	<0.342	<0.372	<0.383
4-Methylphenol	0.333	<0.377	<0.342	<0.372	<0.383
4-Nitroaniline	1.67	<1.89	<1.71	<1.86	<1.91
4-Nitrophenol	0.333	<0.377	<0.342	<0.372	<0.383
Acenaphthene	0.333	<0.377	<0.342	<0.372	<0.383
Acenaphthylene	0.333	<0.377	<0.342	<0.372	<0.383
Anthracene	0.333	<0.377	<0.342	<0.372	<0.383
Benz(a)anthracene	0.333	<0.377	<0.342	<0.372	<0.383
Benz(b)fluoranthene	0.333	<0.377	<0.342	<0.372	<0.383
Benz(g,h,i)perylene	0.333	<0.377	<0.342	<0.372	<0.383
Benz(k)fluoranthene	0.333	<0.377	<0.342	<0.372	<0.383
Benzic acid	1.67	<1.89	<1.71	<1.86	<1.91
Benzyl alcohol	0.667	<0.755	<0.683	<0.744	<0.765
Benzyl benzyl phthalate	0.333	<0.377	<0.342	<0.372	<0.383
Chrysene	0.333	<0.377	<0.342	<0.372	<0.383
Di-n-butylphthalate	0.333	<0.377	<0.342	<0.372	<0.383
Di-n-octylphthalate	0.333	<0.377	<0.342	<0.372	<0.383
Dibenz(a,h)anthracene	0.333	<0.377	<0.342	<0.372	<0.383
Dibenzofuran	0.333	<0.377	<0.342	<0.372	<0.383
Diethylphthalate	0.333	<0.377	<0.342	<0.372	<0.383
Dimethylphthalate	0.333	<0.377	<0.342	<0.372	<0.383
Fluoranthene	0.333	<0.377	<0.342	<0.372	<0.383
Fluorene	0.333	0.0294 JQ	<0.342	0.0209 JQ	<0.383
Hexachlorobenzene	0.333	<0.377	<0.342	<0.372	<0.383
Hexachlorobutadiene	0.333	<0.377	<0.342	<0.372	<0.383
Hexachlorocyclopentadiene	0.333	<0.377	<0.342	<0.372	<0.383
Hexachloroethane	0.333	<0.377 J	<0.342 J	<0.372 J	<0.383 J
Indeno(1,2,3-cd)pyrene	0.333	<0.377	<0.342	<0.372	<0.383
Isochloranthene	0.333	<0.377	<0.342	<0.372	<0.383
Naphthalene	0.333	<0.377	<0.342	<0.372	<0.383
Nitrobenzene	0.333	<0.377	<0.342	<0.372	<0.383
Pentachlorophenol	1.00	<1.13	<1.02	<1.12	<1.15
Phenanthrene	0.333	<0.377	<0.342	<0.372	<0.383

**Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas**

J = Estimated quantization based upon QC data
 JB = Estimated quantization; possibly biased high or a false positive based upon blank data
 JH = Estimated quantization; possibly biased high based upon QC data
 JL = Estimated quantization; possibly biased low or a false negative based upon QC data
 JQ = Estimated quantization; detected below the Practical Quantization Limit
 R = Datum rejected based upon QC data; do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3821SA 22-OCT-95 0.0' - 2.0'	FDUP-02 22-OCT-95 0.0' - 2.0' Duplicate of OT3821SA	OT3822SA 22-OCT-95 0.0' - 2.0'	OT3823SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW7946/NONE (pH)						
623-9045 pH units Soil			7.57	7.46	7.49	7.38
PERCENT SOLID - D2216/NONE (percent)						
623-D2216 Moisture			6.00	7.00	19.0	15.0
METALS TOTAL BY ICP/SW6010/SW3059 (mg/kg)						
Aluminum	50.0		4240	4040	12700	11000
Antimony	25.0		<18.1	<18.9	<21.5 JL	<20.7
Barium	2.00		69.5 J	104 J	148	132
Beryllium	0.300		<2.17	<2.27	0.964	0.746
Cadmium	1.00		<0.724	<0.757	<0.860 JL	<0.829
Calcium	10.0		191000	224000	33300	80000
Chromium	5.00		<36.2	<37.8	22.1 J	10.4
Cobalt	5.00		1.45 JQ	1.21 JQ	5.69	4.23
Copper	5.00		4.34 JQ	3.03 JQ	13.2	7.88
Iron	5.00		4100	4680	10500	9510
Magnesium	25.0		2000 J	2930 J	2170	2100
Manganese	1.00		372	423	678	429
Molybdenum	5.00		1.23 JQ	1.51 JQ	2.19 JL	1.99 JQ
Nickel	5.00		189	202	12.4	9.28
Potassium	60.0		712	962	1880	1320
Silver	5.00		<3.62	<3.78	0.613 JQ	<4.14
Sodium	25.0		46.1 J	194 J	60.4	95.1
Thallium	25.0		<18.1	<18.9	<21.5	<20.7
Vanadium	5.00		8.62	9.31	18.8	22.1
Zinc	1.00		63.2	70.2	35.0 J	22.0
ARSENIC TOTAL BY GFAS/SW 7040 (mg/kg)						
Arsenic	0.500		0.789	1.14	1.44 JL	0.957
LEAD TOTAL BY GFAS/SW 7421 (mg/kg)						
Lead	0.500		9.10	9.74	36.2 JL	23.0 JH
MERCURY TOTAL BY CYAA/SW 7471 (mg/kg)						
Mercury	0.242		<0.210	<0.252	<0.249	<0.277
SELENIUM TOTAL BY GFAS/SW 7740/METHOD (mg/kg)						
Selenium	0.500		<1.90 JL	<0.371	<0.448 JL	<2.20
VOLEATILE ORGANIC COMPOUNDS BY GC/MS - SWB246/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,1,2,2-Tetrachloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,1,2-Trichloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,1-Dichloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,1-Dichloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,2-Dichloroethane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
1,2-Dichloropropane	0.00500		<0.00526	<0.00514	<0.00608	<0.00584
2-Butanone (MEK)	0.0100		<0.0105 J	<0.0123 J	<0.0122 J	<0.0117 J
2-Chloroethyl vinyl ether	0.0100		<0.0105	<0.0123	<0.0122	<0.0117
2-Hexanone	0.0100		<0.0105	<0.0123	<0.0122	<0.0117

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joliet Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)									
Quantitation Limits	Sample ID :		Sample Date :		Sample ID :		Sample Date :		Duplicate of OT3821SA
	OT3821SA		22-OCT-95		FDUP-02		22-OCT-95		
	0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		
Notes :									
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg conc'd)									
4-Methyl-2-pentanone	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	OT3823SA
Acetone	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	22-OCT-95
Benzene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	0.0' - 2.0'
Bromodichloromethane	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Bromoforn	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Bromomethane	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	
Carbon disulfide	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Carbon tetrachloride	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Chlorobenzene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Chloroethane	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	
Chloroform	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Chloromethane	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	
Dibromochloromethane	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Ethylbenzene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Methylene chloride	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Styrene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Tetrachloroethene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Toluene	0.00500	<0.00526	0.00157 IQ	0.00506 IQ	<0.00584	<0.00584	<0.00584	<0.00584	
Trichloroethene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
Vinyl acetate	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	
Vinyl chloride	0.0100	<0.0105	<0.0123	<0.0122	<0.0117	<0.0117	<0.0117	<0.0117	
Xylenes (total)	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
cis-1,2-Dichloroethene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
cis-1,3-Dichloropropene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
trans-1,2-Dichloroethene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
trans-1,3-Dichloropropene	0.00500	<0.00526	<0.00614	<0.00608	<0.00584	<0.00584	<0.00584	<0.00584	
% Semivolatile Residues (Central Limit)									
sur-1,2-Dichloroethane-d4	-	110.1	106.0	106.9	110.1	110.1	110.1	110.1	
sur-Bromofluorobenzene	-	95.1	89.1	94.9	91.1	91.1	91.1	91.1	
sur-Toluene-d8	-	100.0	96.1	103.9	97.1	97.1	97.1	97.1	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW1350 (mg/kg)									
1,2,4-Trichlorobenzene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
1,2-Dichlorobenzene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
1,3-Dichlorobenzene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
1,4-Dichlorobenzene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2,4,5-Trichlorophenol	0.667	<0.704	<0.710	<0.812	<0.781	<0.781	<0.781	<0.781	
2,4,6-Trichlorophenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2,4-Dichlorophenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2,4-Dimethylphenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2,4-Dinitrophenol	1.67	<1.76	<1.77	<2.03	<1.95	<1.95	<1.95	<1.95	
2,4-Dinitrotoluene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2,6-Dinitrotoluene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2-Chloronaphthalene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2-Chlorophenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2-Methylnaphthalene	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2-Methylphenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	
2-Nitroaniline	1.67	<1.76	<1.77	<2.03	<1.95	<1.95	<1.95	<1.95	
2-Nitrophenol	0.333	<0.352	<0.355	<0.406	<0.390	<0.390	<0.390	<0.390	

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID:		Sample Date:		Sample Date:		Sample Date:	
		OT3821SA		OT3822SA		OT3823SA		OT3824SA	
		22-OCT-95		22-OCT-95		22-OCT-95		22-OCT-95	
		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'	
		Notes:		Notes:		Notes:		Notes:	
		Duplicate of OT3821SA		Duplicate of OT3821SA		Duplicate of OT3821SA		Duplicate of OT3821SA	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW-821705W13559 (method cost 4)									
3,3-Dichlorobenzidine	0.667	<0.704	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710
3-Nitroaniline	1.67	<1.76	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77
4,6-Dinitro-2-methylphenol	1.67	<1.76	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77
4-Bromophenyl phenyl ether	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
4-Chloro-3-methylphenol	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
4-Chloroaniline	0.667	<0.704	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710
4-Chlorophenyl phenyl ether	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
4-Methylphenol	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
4-Nitroaniline	1.67	<1.76	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77
4-Nitrophenol	1.67	<1.76	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77
Acenaphthene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Acenaphthylene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Anthracene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benz(a)anthracene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benz(a)pyrene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benz(b)fluoranthene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benzo(g,h,i)perylene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benzofluoranthene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benzotriene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Benzyl alcohol	1.67	<1.76	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77	<1.77
Butyl benzyl phthalate	0.667	<0.704	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710	<0.710
Chrysene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Di-n-butylphthalate	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Di-n-octylphthalate	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Dibenz(a,h)anthracene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Dibenzofuran	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Diethylphthalate	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Dimethylphthalate	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Fluoranthene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Fluorene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Hexachlorobenzene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Hexachlorobutadiene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Hexachlorocyclopentadiene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Hexachloroethane	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Indeno(1,2,3-cd)pyrene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Isophorone	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Naphthalene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Nitrobenzene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Pentachlorophenol	1.00	<1.06	<1.06	<1.06	<1.06	<1.06	<1.06	<1.06	<1.06
Phenanthrene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Phenol	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355
Pyrene	0.333	<0.352	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID:			Duplicate of OT3821SA
		Sample Date:	Depth:	Notes:	
		OT3821SA	22-OCT-95	0.0' - 2.0'	OT3821SA
					0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW1270/SW3550 (mg/kg) cont'd.					
bat(2-Chloroethoxy)methane	0.333	<0.352			<0.390
bat(2-Chloroethyl)ether	0.333	<0.352			<0.390
bat(2-Chloroisopropyl)ether	0.333	<0.352 IL			<0.390 IL
bat(2-Ethylhexyl)phthalate	0.333	<0.352			<0.390
n-Nitrosod-n-propylamine	0.333	<0.352			<0.390
n-Nitrosodiphenylamine	0.333	<0.352			<0.390
% Spent Solvent Recovery (Control Limit)					
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	60.0			57.0
sur-2-Fluorobiphenyl R% (30 - 115)	-	59.1			67.2
sur-2-Fluorophenol R% (25 - 121)	-	45.1			51.1
sur-Nitrobenzene-d5 R% (23 - 120)	-	44.9			54.9
sur-Phenol-d6 R% (24 - 113)	-	57.0			56.2
sur-Terphenyl-d14 R% (18 - 137)	-	100.9			57.0
				100.8	69.0

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data; do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3824SA 22-OCT-95 0.0' - 2.0'	OT3825SA 22-OCT-95 0.0' - 2.0'	OT3826SA 22-OCT-95 0.0' - 2.0'	OT3827SA 22-OCT-95 0.0' - 2.0'	OT3828SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)							
623-9045 pH units Soil			7.38	7.54	7.50	7.45	7.75
PERCENT SOLID - D2216/NONE (percent)							
623-D2216 Moisture			16.0	11.0	13.0	9.00	10.0
METALS TOTAL BY ICP/SW6010/SW3450 (mg/kg)							
Aluminum	50.0		20800	13200	7940	5460	6050
Antimony	25.0		<29.5	<21.4	1.90 JQ	2.42 JQ	<19.6
Barium	2.00		176	107	89.3	59.8	63.3
Beryllium	0.300		1.18	1.72 JQ	<2.48	1.62 JQ	<2.39
Cadmium	1.00		<1.18	<0.858	<0.827	<0.808	<0.782
Calcium	10.0		56500	150000	159000	284000	188000
Chromium	5.00		16.4	21.4 JQ	<41.4	<40.4	<39.8
Cobalt	5.00		4.96 JQ	2.23 JQ	2.40 JQ	3.15 JQ	2.27 JQ
Copper	5.00		10.5	<42.9	4.96 JQ	8.89 JQ	3.91 JQ
Iron	5.00		15600	11200	7170	11000	7630
Magnesium	25.0		3200	2200	1810	2340	2340
Manganese	1.00		421	325	447	538	361
Molybdenum	5.00		<5.90	2.49 JQ	2.07 JQ	2.99 JQ	2.03 JQ
Nickel	5.00		14.0	63.1	218	218	206
Potassium	60.0		2740	1850	955	1260	1210
Silver	5.00		<5.90	<4.29	<4.14	<4.04	<3.91
Sodium	25.0		364	245	79.2	287	121
Thallium	25.0		<29.5	<21.4	<20.7	<20.2	<19.6
Vanadium	5.00		23.6	20.3	19.7	20.4	15.2
Zinc	1.00		36.5	37.2	72.9	77.3	70.9
ARSENIC TOTAL BY GFAS/SW 7069 (mg/kg)							
Arsenic	0.500		1.86 JH	1.32	1.16 JL	4.14	3.21
LEAD TOTAL BY GFAS/SW 7421 (mg/kg)							
Lead	0.500		62.2	16.6	16.3	16.2	14.2
MERCURY TOTAL BY CVAA/SW 7471 (mg/kg)							
Mercury	0.242		<0.344	<0.256	<0.257	<0.241	<0.263
SELENIUM TOTAL BY GFAS/SW 7740/METHOD (mg/kg)							
Selenium	0.500		<0.590	<0.404	<2.11 JL	<0.413	<1.89 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW2244/NONE (mg/kg)							
1,1,1-Trichloroethane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
1,1,2,2-Tetrachloroethane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
1,1,2-Trichloroethane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
1,1-Dichloroethane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
1,2-Dichloroethane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
1,2-Dichloropropane	0.00500		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
2-Butanone (MEK)	0.0100		<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
2-Chloroethyl vinyl ether	0.0100		<0.0115 J	<0.0108 J	<0.0113 J	<0.0108 J	<0.0110 J
2-Hexanone	0.0100		<0.0115	<0.0108	<0.0113	<0.0108	<0.0110

DATA SUMMARY TABLE

**Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas**

PARAMETER/METHOD(UNITS)						
	Quantitation Limits	Sample ID : Sample Date :	OT1825SA 22-OCT-95 0.0' - 2.0'	OT1826SA 22-OCT-95 0.0' - 2.0'	OT1827SA 22-OCT-95 0.0' - 2.0'	OT1828SA 22-OCT-95 0.0' - 2.0'
		Depth :				
		Notes :				
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg) cont'd.						
4-Methyl-2-pentanol	0.0100	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110 J
Acetone	0.0100	<0.0115 J	<0.0108 J	<0.0113 J	<0.0108 J	<0.0110 J
Benzene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Bromodichloromethane	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Bromoform	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Bromomethane	0.0100	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110
Carbon disulfide	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Carbon tetrachloride	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Chlorobenzene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Chloroethane	0.0100	<0.0115 J	<0.0108 J	<0.0113 J	<0.0108 J	<0.0110 J
Chloroform	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Chloromethane	0.0100	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110
Dibromochloromethane	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Ethylbenzene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Methylene chloride	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Styrene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Tetrachloroethene	0.00500	<0.00574	0.00549	<0.00566	0.000375 JQ	0.000366 JQ
Toluene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
Trichloroethene	0.00500	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110
Vinyl acetate	0.0100	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110
Vinyl chloride	0.0100	<0.0115	<0.0108	<0.0113	<0.0108	<0.0110
Xylenes (total)	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
cis-1,2-Dichloroethane	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
cis-1,3-Dichloropropene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
trans-1,2-Dichloroethane	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552
trans-1,3-Dichloropropene	0.00500	<0.00574	<0.00540	<0.00566	<0.00540	<0.00552

% Surrogate Recovery (Control Limit)

sur-1,2-Dichloroethane-d4 R% (70-121)
sur-Bromofluorobenzene R% (74-121)
sur-Toluene-d8 R% (81-117)

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (m/μg)

Chemical Name	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
1,2,4-Trichlorobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
1,2-Dichlorobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
1,3-Dichlorobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
1,4-Dichlorobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2,4,5-Trichlorophenol	0.667	<1.05	<0.749	<0.754	<0.731	<0.731
2,4,6-Trichlorophenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2,4-Dichlorophenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2,4-Dimethylphenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2,4-Dinitrophenol	1.67	<2.63	<1.87	<1.89	<1.83	<1.83
2,4-Dinitrotoluene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2,6-Dinitrotoluene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2-Chloronaphthalene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2-Chlorophenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2-Methylnaphthalene	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2-Methylphenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365
2-Nitroaniline	1.67	<2.63	<1.87	<1.89	<1.83	<1.83
2-Nitrophenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.365

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)		Sample ID :	OT3824SA	OT3825SA	OT3826SA	OT3827SA	OT3828SA
Quantitation Limits	Sample Date :	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
	Notes :						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7870/SW3550 (mg/kg conc'd)							
3,3'-Dichlorobenzidine	0.667	<1.05	<0.749	<0.754	<0.731	<0.731	<0.731
3-Nitroaniline	1.67	<2.63	<1.87	<1.89	<1.83	<1.83	<1.83
4,6-Dinitro-2-methylphenol	1.67	<2.63	<1.87	<1.89	<1.83	<1.83	<1.83
4-Bromophenyl phenyl ether	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
4-Chloro-3-methylphenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
4-Chloroaniline	0.667	<1.05	<0.749	<0.754	<0.731	<0.731	<0.731
4-Chlorophenyl phenyl ether	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
4-Methylphenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
4-Nitroaniline	1.67	<2.63	<1.87	<1.89	<1.83	<1.83	<1.83
4-Nitrophenol	1.67	<2.63	<1.87	<1.89	<1.83	<1.83	<1.83
Acenaphthene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Acenaphthylene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Anthracene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzo(a)anthracene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzo(a)pyrene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzo(b)fluoranthene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzo(k,h)fluoranthene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzo(k)fluoranthene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Benzoic acid	1.67	<2.63	<1.87	<1.89	<1.83	<1.83	<1.83
Benzyl alcohol	0.667	<1.05	<0.749	<0.754	<0.731	<0.731	<0.731
Butyl benzyl phthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Chrysene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Di-n-butylphthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Di-n-octylphthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Dibenz(a,h)anthracene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Dibenzofuran	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Diethylphthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Dimethylphthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Fluoranthene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Fluorene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Hexachlorobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Hexachlorobutadiene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Hexachlorocyclopentadiene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Hexachloroethane	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Indeno(1,2,3-cd)pyrene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Iophtorone	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Naphthalene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Nitrobenzene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Pentachlorophenol	1.00	<1.58	<1.12	<1.13	<1.10	<1.10	<1.10
Phenanthrene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Phenol	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365
Pyrene	0.333	<0.526	<0.374	<0.377	<0.366	<0.366	<0.365

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)												
Quantitation Limits	Sample ID :		OT3824SA		OT3825SA		OT3826SA		OT3827SA		OT3828SA	
	Sample Date :		22-OCT-95		22-OCT-95		22-OCT-95		22-OCT-95		22-OCT-95	
	Depth :		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'	
Notes :												
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82176/SW3559 (mwt/mt) cont'd.												
	bio(2-Chloroethoxy)methane	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
	bio(2-Chloroethoxy)ether	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
	bio(2-Chloroisopropyl)ether	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
	bio(2-Ethylhexyl)phthalate	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
	n-Nitrosodi-n-propylamine	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
	n-Nitrosodiphenylamine	0.333	<0.526	<0.374	<0.377	<0.366	<0.365					
% Sarcosine Recovery (Control Limit)												
-	sur-2,4,6-Trichlorophenol R% (19 - 122)	67.0	68.0	65.0	74.9	48.0						
-	sur-2-Fluorobiphenyl R% (30 - 115)	73.0	70.1	67.9	73.0	60.0						
-	sur-2-Fluorophenol R% (25 - 121)	58.0	58.0	57.1	63.0	49.1						
-	sur-Nitrobenzene-d5 R% (23 - 120)	58.0	65.0	63.9	68.9	52.1						
-	sur-Phenol-d6 R% (24 - 113)	58.0	58.9	61.0	64.8	56.9						
-	sur-Terphenyl-d14 R% (18 - 137)	77.9	106.1	76.1	113.9	87.1						

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data; do not use.

TABLE C-1

DATA SUMMARY TABLE
 Aerospace Museum Site
 Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3829SA 22-OCT-95 0.0' - 2.0'	OT3830SA 22-OCT-95 0.0' - 2.0'	OT3831SA 22-OCT-95 0.0' - 2.0'	FDUP-03 22-OCT-95 0.0' - 2.0'
Duplicate of OT3831SA						
SOIL pH - SW9945/NONE (none)						
623-9045 pH units Soil			7.75	7.67	7.37	7.41
PERCENT SOLID - D2116 /NONE (percent)						
623-D2216 Moisture			17.0	14.0	17.0	19.0
METALS TOTAL BY ICP/MSW6910/SW3929 (mg/kg)						
Aluminum	50.0		7260	12200	8850	8380
Antimony	25.0		<21.2	<22.0 JL	<22.3	<21.9
Barium	2.00		136	107	106	116
Beryllium	0.300		<2.54	0.793	0.624	0.613
Cadmium	1.00		<0.848	<0.881 JL	<0.892	<0.876
Calcium	10.0		222000	66000	117000	90900
Chromium	5.00		11.0 JQ	13.0	8.74	7.27
Cobalt	5.00		4.58	3.52 JQ	2.50 JQ	2.72 JQ
Copper	5.00		6.78 JQ	9.16	6.33	7.27
Iron	5.00		8100	8360	6580	5970
Magnesium	25.0		2680	2650	1770	1630
Manganese	1.00		667	296	168	190
Molybdenum	5.00		2.54 JQ	1.32 JL	<4.46	1.31 JQ
Nickel	5.00		224	9.34	6.42	5.96
Potassium	60.0		1020	1710	1060	815
Silver	5.00		<4.24	<4.40	<4.46	<4.38
Sodium	25.0		182	69.9	98.6	56.0
Thallium	5.00		<21.2	<22.0	<22.3	<21.9
Vanadium	5.00		28.5	17.1	18.4	19.6
Zinc	1.00		75.0	24.0	20.8	20.0
ARSENIC TOTAL BY GF/AA/SW 7649 (mg/kg)						
Arsenic	0.500		3.47	1.56 JL	1.11	0.714
LEAD TOTAL BY GF/AA/SW 7431 (mg/kg)						
Lead	0.500		19.3	16.0 J	21.0	22.4
MERCURY TOTAL BY CV/AA/SW 7471 (mg/kg)						
Mercury	0.242		<0.270	<0.228	<0.277	<0.286
SELENIUM TOTAL BY GF/AA/SW 7749/METHOD (mg/kg)						
Selenium	0.500		<2.25 JL	0.143 JL	0.0993 JL	<2.19 J
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7246/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,1,2,2-Tetrachloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,1,2-Trichloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,1-Dichloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,1-Dichloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,2-Dichloroethane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
1,2-Dichloropropane	0.00500		<0.00594	<0.00574	<0.00587	<0.00606
2-Butanone (MEK)	0.0100		<0.00594	<0.00574	<0.00587	<0.00606
2-Chloroethyl vinyl ether	0.0100		<0.0119 J	<0.0115	<0.0117	<0.0121 J
2-Hexanone	0.0100		<0.0119	<0.0115 R	<0.0117 R	<0.0121

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Sample ID:				Quantitation Limits
	OT3829SA	OT3830SA	OT3831SA	FDUP-03	
	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	
	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
	Notes:				Duplicate of OT3831SA
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82/60SW3559 (mwt/m²) cont'd.					
4-Methyl-2-pentanone	<0.019	<0.015	<0.017	<0.021	
Acetone	<0.019	<0.015	<0.017	<0.021	
Benzene	<0.00594	<0.00574	<0.00587	<0.00606	
Bromodichloromethane	<0.00594	<0.00574	<0.00587	<0.00606	
Bromoform	<0.00594	<0.00574	<0.00587	<0.00606	
Bromomethane	<0.019	<0.015	<0.017	<0.021	
Carbon disulfide	<0.00594	<0.00574	<0.00587	<0.00606	
Carbon tetrachloride	<0.00594	<0.00574	<0.00587	<0.00606	
Chlorobenzene	<0.00594	<0.00574	<0.00587	<0.00606	
Chloroethane	<0.019	<0.015	<0.017	<0.021	
Chloroform	<0.00594	<0.00574	<0.00587	<0.00606	
Chloromethane	<0.019	<0.015	<0.017	<0.021	
Dibromodichloromethane	<0.00594	<0.00574	<0.00587	<0.00606	
Ethylbenzene	<0.00594	<0.00574	<0.00587	<0.00606	
Methylene chloride	<0.00594	<0.00574	<0.00587	<0.00606	
Styrene	<0.00594	<0.00574	<0.00587	<0.00606	
Tetrachloroethene	<0.00594	<0.00574	<0.00587	<0.00606	
Toluene	0.00184	0.00163	0.00328	0.00599	
Trichloroethene	<0.00594	<0.00574	<0.00587	<0.00606	
Vinyl acetate	<0.019	<0.015	<0.017	<0.021	
Vinyl chloride	<0.019	<0.015	<0.017	<0.021	
Xylenes (total)	<0.00594	<0.00574	<0.00587	<0.00606	
cis-1,2-Dichloroethene	<0.00594	<0.00574	<0.00587	<0.00606	
cis-1,3-Dichloropropene	<0.00594	<0.00574	<0.00587	<0.00606	
trans-1,2-Dichloroethene	<0.00594	<0.00574	<0.00587	<0.00606	
trans-1,3-Dichloropropene	<0.00594	<0.00574	<0.00587	<0.00606	
% Surrogate Recovery (Central Limit)					
sur-1,2-Dichloroethane-d4	110.1	100.9	104.9	114.9	
sur-Bromofluorobenzene	85.0	82.9	88.1	88.9	
sur-Toluene-d8	97.0	99.0	98.0	98.8	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82/60SW3559 (mwt/m²)					
1,2,4-Trichlorobenzene	<0.400	<0.384	<0.397	<0.411	
1,2-Dichlorobenzene	<0.400	<0.384	<0.397	<0.411	
1,3-Dichlorobenzene	<0.400	<0.384	<0.397	<0.411	
1,4-Dichlorobenzene	<0.400	<0.384	<0.397	<0.411	
2,4,5-Trichlorophenol	<0.799	<0.769	<0.794	<0.822	
2,4,6-Trichlorophenol	<0.400	<0.384	<0.397	<0.411	
2,4-Dichlorophenol	<0.400	<0.384	<0.397	<0.411	
2,4-Dimethylphenol	<0.400	<0.384	<0.397	<0.411	
2,4-Dinitrophenol	<2.00	<1.92	<1.98	<2.06	
2,4-Dinitrotoluene	<0.400	<0.384	<0.397	<0.411	
2,6-Dinitrotoluene	<0.400	<0.384	<0.397	<0.411	
2-Chloronaphthalene	<0.400	<0.384	<0.397	<0.411	
2-Chlorophenol	<0.400	<0.384	<0.397	<0.411	
2-Methylthiophthalene	<0.400	<0.384	<0.397	<0.411	
2-Methylphenol	<0.400	<0.384	<0.397	<0.411	
2-Nitroaniline	<2.00	<1.92	<1.98	<2.06	
2-Nitrophenol	<0.400	<0.384	<0.397	<0.411	

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(S)	Quantitation Limits	Sample ID:		OT3829SA 22-OCT-95 0.0' - 2.0'	OT3830SA 22-OCT-95 0.0' - 2.0'	OT3831SA 22-OCT-95 0.0' - 2.0'	FDUP-03 22-OCT-95 0.0' - 2.0'
		Sample Date:	Depth:				
			Notes:				Duplicate of OT3831SA
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SV3559 (mg/kg) cm¹/g							
3,4-Dichlorobenzidine	0.667			<0.799	<0.769	<0.794	<0.822
3-Nitroaniline	1.67			<2.00	<1.92	<1.98	<2.06
4,6-Dinitro-2-methylphenol	1.67			<2.00	<1.92	<1.98	<2.06
4-Bromophenyl phenyl ether	0.333			<0.400	<0.384	<0.397	<0.411
4-Chloro-3-methylphenol	0.333			<0.400	<0.384	<0.397	<0.411
4-Chloroaniline	0.667			<0.799	<0.769	<0.794	<0.822
4-Chlorophenyl phenyl ether	0.333			<0.400	<0.384	<0.397	<0.411
4-Methylphenol	0.333			<0.400	<0.384	<0.397	<0.411
4-Nitroaniline	0.333			<2.00	<1.92	<1.98	<2.06
4-Nitrophenol	1.67			<2.00	<1.92	<1.98	<2.06
Acenaphthene	0.333			<0.400	<0.384	<0.397	<0.411
Acenaphthylene	0.333			<0.400	<0.384	<0.397	<0.411
Anthracene	0.333			<0.400	<0.384	<0.397	<0.411
Benz(a)anthracene	0.333			<0.400	<0.384	<0.397	<0.411
Benzo(b)pyrene	0.333			<0.400	<0.384	<0.397	<0.411
Benzo(b)fluoranthene	0.333			<0.400	<0.384	<0.397	<0.411
Benzo(g,h,i)perylene	0.333			<0.400	<0.384	<0.397	<0.411
Benzo(k)fluoranthene	0.333			<0.400	<0.384	<0.397	<0.411
Benzoic acid	0.333			<2.00	<1.92	<1.98	<2.06
Benzyl alcohol	1.67			<2.00	<1.92	<1.98	<2.06
Benzyl benzyl phthalate	0.667			<0.799	<0.769	<0.794	<0.822
Chrysene	0.333			<0.400	<0.384	<0.397	<0.411
Di-n-butylphthalate	0.333			<0.400	<0.384	<0.397	<0.411
Di-n-octylphthalate	0.333			<0.400	<0.384	0.0237	<0.411
Dibenz(a,h)anthracene	0.333			<0.400	<0.384	<0.397	<0.411
Dibenzofuran	0.333			<0.400	<0.384	<0.397	<0.411
Diethylphthalate	0.333			<0.400	<0.384	<0.397	<0.411
Dimethylphthalate	0.333			<0.400	<0.384	<0.397	<0.411
Fluoranthene	0.333			<0.400	<0.384	<0.397	<0.411
Fluorene	0.333			0.0427	<0.384	<0.397	<0.411
Hexachlorobenzene	0.333			<0.400	<0.384	<0.397	0.0440
Hexachlorobutadiene	0.333			<0.400	<0.384	<0.397	<0.411
Hexachlorocyclopentadiene	0.333			<0.400	<0.384	<0.397	<0.411
Hexachloroethane	0.333			<0.400	<0.384	<0.397	<0.411
Hexachlorocyclopentadiene	0.333			<0.400	<0.384	<0.397	<0.411
Indeno(1,2,3-cd)pyrene	0.333			<0.400	<0.384	<0.397	<0.411
Isophorone	0.333			<0.400	<0.384	<0.397	<0.411
Naphthalene	0.333			<0.400	<0.384	<0.397	<0.411
Nitrobenzene	0.333			<0.400	<0.384	<0.397	<0.411
Pentachlorophenol	1.00			<1.20	<1.15	<1.19	<1.23
Phenanthrene	0.333			<0.400	<0.384	<0.397	<0.411
Phenol	0.333			<0.400	<0.384	<0.397	<0.411
Pyrene	0.333			0.0479	<0.384	<0.397	0.0342

TABLE C-1

DATA SUMMARY TABLE

Artesiana Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)						
Quantitation Limits	Sample ID :	OT3825SA		OT3830SA		FDUP-03
		22-OCT-95		22-OCT-95		22-OCT-95
		0.0' - 2.0'		0.0' - 2.0'		0.0' - 2.0'
Notes :	Duplicate of OT3831SA					
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SVI 87765W/1550 (methyl conf'd)						
0.333	ben(2-Chloroethoxy)methane	<0.400	<0.384	<0.397	<0.411	
0.333	ben(2-Chloroethyl)ether	<0.400	<0.384	<0.397	<0.411	
0.333	ben(2-Chloroisopropyl)ether	<0.400	<0.384	<0.397	<0.411	IL
0.333	ben(2-Ethylhexyl)phthalate	<0.400	<0.384	<0.397	<0.411	
0.333	n-Nitrosodi-n-propylamine	<0.400	<0.384	<0.397	<0.411	
0.333	n-Nitrosodiphenylamine	<0.400	<0.384	<0.397	<0.411	
% Saccharin Reservoir (Control Limit)						
-	sur-2,4,6-Trichlorophenol R% (19 - 122)	62.9	71.9	55.0	60.0	
-	sur-2-Fluorobiphenyl R% (30 - 115)	70.0	68.0	68.0	65.9	
-	sur-2-Fluorophenol R% (25 - 121)	51.1	53.0	52.9	52.0	
-	sur-Nitrobenzene-d5 R% (23 - 120)	56.0	64.1	66.0	59.1	
-	sur-Phenol-d6 R% (24 - 113)	55.1	60.0	67.1	55.9	
-	sur-Terphenyl-d14 R% (18 - 137)	83.0	80.2	70.0	74.0	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation: possibly biased high based upon QC data
 JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation: detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data: do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3832SA 22-OCT-95 0.0' - 2.0'	OT3833SA 22-OCT-95 0.0' - 2.0'	OT3834SA 22-OCT-95 0.0' - 2.0'	OT3835SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)						
623-9045 pH units Soil			7.54	7.41	7.47	7.50
PERCENT SOLID - D2216/NONE (percent)						
623-D2216 Moisture			15.0	11.0	15.0	9.00
METALS TOTAL BY CP/SW6010/SW3059 (mg/kg)						
Aluminum	50.0		12200	6320	10600	6460
Antimony	25.0		<21.3	<20.2	<21.0	2.32 IQ
Barium	2.00		1.21	75.1	102	6730
Beryllium	0.300		0.682	<2.42	0.756	<2.24
Cadmium	1.00		<0.853	<0.808	<0.840	<0.748
Calcium	10.0		91300	100000	61400	142000
Chromium	5.00		9.72	<40.4	11.4	<37.4
Cobalt	5.00		2.90 IQ	2.18 IQ	3.11 IQ	2.24 IQ
Copper	5.00		6.14	5.66 IQ	8.06	6.73 IQ
Iron	5.00		8130	5860	9300	5400
Magnesium	25.0		1950	1930	2320	1800
Manganese	1.00		317	221	261	303
Molybdenum	5.00		2.13 IQ	1.78 IQ	2.86 IQ	1.42 IQ
Nickel	5.00		7.85	57.9	9.83	196
Potassium	60.0		<4.26	<4.04	<4.20	<3.74
Silver	5.00		248	88.6	70.1	90.7
Sodium	25.0		<21.3	<20.2	<21.0	<18.7
Thallium	5.00		21.7	12.4	21.1	17.7
Vanadium	1.00		22.0	33.7	20.0	65.7
Zinc						
ARSENIC TOTAL BY GFAA/SW 7069 (mg/kg)						
Arsenic	0.500		1.58	0.663	1.27	0.685
LEAD TOTAL BY GFAA/SW 7431 (mg/kg)						
Lead	0.500		36.0	14.4	21.9	14.2
MERCURY TOTAL BY CVA/SW 7471 (mg/kg)						
Mercury	0.242		<0.287	<0.243	<0.272	<0.224
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/kg)						
Selenium	0.500		<0.442	<2.05 IL	<0.452	<1.96 IL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8248/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,1,2,2-Tetrachloroethane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,1,2-Trichloroethane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,1-Dichloroethane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,1-Dichloroethene	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,2-Dichloroethane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
1,2-Dichloropropane	0.00500		<0.00580	<0.00560	<0.00586	<0.00540
2-Butanone (MEK)	0.0100		<0.00580	<0.00560	<0.00586	<0.00540
2-Chloroethyl vinyl ether	0.0100		<0.0116 J	<0.0112 J	<0.0117 J	<0.0108 J
2-Hexanone	0.0100		<0.0116	<0.0112	<0.0117	<0.0108

TABLE C-1

DATA SUMMARY TABLE

Aviation Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS					
Quantitation Limits	Sample ID				
	Sample Date				
	Depth				
Notes					
OT38325A					
22-OCT-95					
0.0' - 2.0'					
OT3833SA					
22-OCT-95					
0.0' - 2.0'					
OT3834SA					
22-OCT-95					
0.0' - 2.0'					
OT3835SA					
22-OCT-95					
0.0' - 2.0'					
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82706/NONE (methyl ester)					
Acetone	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Benzene	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Bromodichloromethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Bromoform	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Bromomethane	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Carbon disulfide	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Carbon tetrachloride	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Chlorobenzene	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Chloroethane	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Chloroform	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Chloromethane	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Dibromodichloromethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Ethylbenzene	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Methylene chloride	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Styrene	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Tetrachloroethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Toluene	0.00500	0.000635	0.000569	0.000465	0.0104
Trichloroethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
Vinyl acetate	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Vinyl chloride	0.0100	<0.0116	<0.0112	<0.0117	<0.0108
Xylenes (total)	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
cis-1,2-Dichloroethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
cis-1,3-Dichloropropene	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
trans-1,2-Dichloroethane	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
trans-1,3-Dichloropropene	0.00500	<0.00580	<0.00560	<0.00586	<0.00540
% Sample Recoveries (Control Limit)					
sur-1,2-Dichloroethane-d4	-	104.0	108.0	111.9	108.9
sur-Bromofluorobenzene	-	82.9	87.0	88.9	86.0
sur-Toluene-d8	-	95.0	98.0	96.9	98.0
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82706/SW3558 (methyl)					
1,2,4-Trichlorobenzene	0.333	<0.386	<0.370	<0.390	<0.366
1,2-Dichlorobenzene	0.333	<0.386	<0.370	<0.390	<0.366
1,3-Dichlorobenzene	0.333	<0.386	<0.370	<0.390	<0.366
1,4-Dichlorobenzene	0.333	<0.386	<0.370	<0.390	<0.366
2,4,5-Trichlorophenol	0.667	<0.773	<0.740	<0.781	<0.731
2,4,6-Trichlorophenol	0.333	<0.386	<0.370	<0.390	<0.366
2,4-Dichlorophenol	0.333	<0.386	<0.370	<0.390	<0.366
2,4-Dimethylphenol	0.333	<0.386	<0.370	<0.390	<0.366
2,4-Dinitrophenol	1.67	<1.93	<1.85	<1.95	<1.83
2,4-Dinitrotoluene	0.333	<0.386	<0.370	<0.390	<0.366
2,6-Dinitrotoluene	0.333	<0.386	<0.370	<0.390	<0.366
2-Chloronaphthalene	0.333	<0.386	<0.370	<0.390	<0.366
2-Chlorophenol	0.333	<0.386	<0.370	<0.390	<0.366
2-Methylnaphthalene	0.333	<0.386	<0.370	<0.390	<0.366
2-Methylphenol	0.333	<0.386	<0.370	<0.390	<0.366
2-Nitrotoluene	1.67	<1.93	<1.85	<1.95	<1.83
2-Nitrophenol	0.333	<0.386	<0.370	<0.390	<0.366

TABLE C-1

DATA SUMMARY TABLE

Arespace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(S)	Quantitation Limits	Sample ID			Sample Date			Depth			Notes		
		OT38325A	OT38335A	OT38345A	OT38335A	OT38345A	OT38355A	OT38325A	OT38335A	OT38345A	OT38335A	OT38345A	OT38355A
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW78705W3550 (method cont'd)													
3,3'-Dichlorobenzidine	0.667	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731
3-Nitroaniline	1.67	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83
4,6-Dinitro-2-methylphenol	1.67	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83
4-Bromophenyl phenyl ether	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
4-Chloro-3-methylphenol	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
4-Chloroaniline	0.667	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731
4-Chlorophenyl phenyl ether	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
4-Methylphenol	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
4-Nitroaniline	1.67	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83
4-Nitrophenol	1.67	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83
Acenaphthene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Acenaphthylene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Anthracene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(a)anthracene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(a)pyrene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(b)fluoranthene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(g,h,i)perylene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(k)fluoranthene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzo(e)anthracene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Benzoic acid	1.67	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83	<1.93	<1.85	<1.95	<1.85	<1.95	<1.83
Benzyl alcohol	0.667	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731	<0.773	<0.740	<0.781	<0.740	<0.781	<0.731
Benzyl benzoate	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Chrysene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Di-n-butylphthalate	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Di-n-octylphthalate	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Dibenzofuran	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Dibenzofuran	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Diethylphthalate	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Dimethylphthalate	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Fluorene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Hexachlorobenzene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Hexachlorobutadiene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Hexachlorocyclopentadiene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Hexachloroethane	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Indeno(1,2,3-cd)pyrene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Isochloro	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Naphthalene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Nitrobenzene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Pentachlorophenol	1.00	<1.16	<1.11	<1.17	<1.11	<1.17	<1.10	<1.16	<1.11	<1.17	<1.11	<1.17	<1.10
Phenanthrene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Phenol	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366
Pyrene	0.333	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366	<0.386	<0.370	<0.390	<0.370	<0.390	<0.366

TABLE C-1

DATA SUMMARY TABLE

Avcopec Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)											
Quantitation Limits	Sample ID :		OT3832SA	OT3833SA	OT3834SA	OT3835SA					
	Sample Date :		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95					
	Depth :	Notes :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'					
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (see/see) cont'd.											
						</					

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Qenestration Limits	Sample ID: Sample Date: Depth: Notes:	OT3838SA 22-OCT-95 0.0' - 2.0'	OT3837SA 22-OCT-95 0.0' - 2.0'	OT3838SA 22-OCT-95 0.0' - 2.0'	OT3839SA 22-OCT-95 0.0' - 2.0'	OT3840SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)							
623-9045 pH unit Soil			7.67	7.71	7.18	7.58	7.26
PERCENT SOLID - D2116/NONE (percent)							
623-D2116 Moisture			10.0	13.0	11.0	11.0	10.0
METALS, TOTAL BY ICP/SW6010/SW3659 (mg/kg)							
Aluminum	50.0		7090	9770	7480	10100	5120
Antimony	25.0		2.19 JQ	<21.6	<20.6	<21.0	1.98 JL
Barium	2.00		77.0	79.1	85.9	92.2	74.1 J
Beryllium	0.300		<2.43	0.605	<2.48	0.587	<2.47
Cadmium	1.00		<0.811	<0.864	<0.826	<0.839	<0.823 JL
Calcium	10.0		149000	104000	182000	117000	165000
Chromium	5.00		<40.6	8.47	<41.3	8.39	14.8 JQ
Cobalt	5.00		2.68 JQ	2.76 JQ	2.81 JQ	2.77 JQ	2.14 J
Copper	5.00		6.49 JQ	7.17	4.13 JQ	4.70	14.8 J
Iron	5.00		7980	10200	10400	8000	20000
Magnesium	25.0		2150	2380	2270	2110	1880
Manganese	1.00		408	283	368	231	476
Molybdenum	5.00		3.00 JQ	<4.32	<4.13	<4.20	4.03 JL
Nickel	5.00		214	8.73	220	7.38	222
Potassium	5.00		867	1790	1300	1090	1070
Silver	5.00		<4.06	<4.32	<4.13	<4.20	<4.12 J
Sodium	25.0		112	88.8	129	79.5	426
Thallium	5.00		<20.3	<21.6	<20.6	<21.0	<20.6 J
Vanadium	5.00		20.4	19.6	19.1	21.6	10.4
Zinc	1.00		73.8	19.3	76.7	14.3	106 J
ARSENIC, TOTAL BY GFAS/SW 7660 (mg/kg)							
Arsenic	0.500		1.37	2.05	1.94	1.81	2.87 JL
LEAD, TOTAL BY GFAS/SW 7421 (mg/kg)							
Lead	0.500		22.4	11.0	14.9	11.2	1030
MERCURY, TOTAL BY CVAS/SW 7471 (mg/kg)							
Mercury	0.223		<0.255	<0.223	<0.215	<0.265	<0.218
SELENIUM, TOTAL BY GFAS/SW 7740/METHOD (mg/kg)							
Selenium	0.500		<2.03	0.0864 JL	<0.429 JL	0.0829 JL	<0.424 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)							
1,1,1-Trichloroethane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
1,1,2,2-Tetrachloroethane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
1,1,2-Trichloroethane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
1,1-Dichloroethane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
1,2-Dichloroethane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
1,2-Dichloropropane	0.00500		<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
2-Butanone (MEK)	0.0100		<0.0110 J	<0.0113	<0.0111	<0.0107	<0.0115 J
2-Chloroethyl vinyl ether	0.0100		<0.0110	<0.0113 R	<0.0111 R	<0.0107 R	<0.0115
2-Hexanone	0.0100		<0.0110	<0.0113 J	<0.0111 J	<0.0107 J	<0.0115

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Jett Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)						
Quantitation Limits	Sample ID :					
	Sample Date :					
	Depth :					
Notes :						
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (unified conf'd)						
4-Methyl-2-pentanone	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Acetone	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Benzene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Bromodichloromethane	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Bromoform	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Bromomethane	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Carbon disulfide	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Carbon tetrachloride	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Chlorobenzene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Chloroethane	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Chloroform	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Chloromethane	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Dibromodichloromethane	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Ethylbenzene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Methylene chloride	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Styrene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Tetrahydroethene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Toluene	0.00500	0.00703	0.00491	0.00812	0.00825	0.00125
Trichloroethene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
Vinyl acetate	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Vinyl chloride	0.0100	<0.0110	<0.0113	<0.0111	<0.0107	<0.0115
Xylenes (total)	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
cis-1,2-Dichloroethene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
cis-1,3-Dichloropropene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
trans-1,2-Dichloroethene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
trans-1,3-Dichloropropene	0.00500	<0.00550	<0.00563	<0.00556	<0.00536	<0.00574
OT3837SA OT3838SA OT3839SA OT3840SA						
22-OCT-95 22-OCT-95 22-OCT-95 22-OCT-95						
0.0' - 2.0' 0.0' - 2.0' 0.0' - 2.0' 0.0' - 2.0'						

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8260/SW8265 (unified)

1,2,4-Trichlorobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
1,2-Dichlorobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
1,3-Dichlorobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
1,4-Dichlorobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2,4,5-Trichlorophenol	0.667	<0.739	<0.755	<0.741	<0.744	<0.729
2,4,6-Trichlorophenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2,4-Dichlorophenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2,4-Dimethylphenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2,4-Dinitrophenol	1.67	<1.85	<1.89	<1.85	<1.86	<1.82
2,4-Dinitrotoluene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2,6-Dinitrotoluene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2-Chloronaphthalene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2-Chlorophenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2-Methylnaphthalene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2-Methylphenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
2-Nitrophenol	1.67	<1.85	<1.89	<1.85	<1.86	<1.82
2-Nitrotoluene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
3,3-Dichlorobenzene	0.667	<0.739	<0.755	<0.741	<0.744	<0.729

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID:		Sample Date:		Depth:		Notes:	
		OT3836SA	OT3837SA	OT3838SA	OT3839SA	OT3840SA	OT3841SA	OT3842SA	OT3843SA
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW-61706W1550 (method cont'd.)									
3-Nitroaniline	1.67	<1.85	<1.89	<1.85	<1.86	<1.82	<1.82	<1.82	<1.82
4,6-Dinitro-2-methylphenol	1.67	<1.85	<1.89	<1.85	<1.86	<1.82	<1.82	<1.82	<1.82
4-Bromophenyl phenyl ether	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
4-Chloro-3-methylphenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
4-Chloroaniline	0.667	<0.739	<0.755	<0.741	<0.744	<0.729	<0.729	<0.729	<0.729
4-Chlorophenyl phenyl ether	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
4-Methylphenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
4-Nitroaniline	1.67	<1.85	<1.89	<1.85	<1.86	<1.82	<1.82	<1.82	<1.82
4-Nitrophenol	1.67	<1.85	<1.89	<1.85	<1.86	<1.82	<1.82	<1.82	<1.82
Acenaphthene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Acenaphthylene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Anthracene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benz(a)anthracene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benz(a)pyrene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benz(b)fluoranthene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benz(g,h,i)perylene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benz(k)fluoranthene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benzofuran	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benzothiazole	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benzyl alcohol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Benzyl benzyl phthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Chrysene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Di-n-butylphthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Di-n-octylphthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Dibenz(a,h)anthracene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Dibenzofuran	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Diethylphthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Dimethylphthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Fluoranthene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Fluorene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Hexachlorobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Hexachlorobutadiene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Hexachlorocyclopentadiene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Hexachloroethane	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Indeno(1,2,3-cd)pyrene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Isophthalic acid	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Naphthalene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Nitrobenzene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Pentachlorophenol	1.00	<1.11	<1.13	<1.11	<1.12	<1.09	<1.09	<1.09	<1.09
Phenanthrene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Phenol	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364
Pyrene	0.333	<0.369	<0.378	<0.371	<0.372	<0.364	<0.364	<0.364	<0.364

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :				
		Sample Date :	Depth :	Notes :		
		OT3836SA	OT3837SA	OT3838SA	OT3839SA	OT3840SA
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8170.SW1559 (see/see) cont'd.						
bio(2-Chloroethoxy)methane	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
bio(2-Chloroethoxy)ether	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
bio(2-Chloroisopropyl)ether	0.333	<0.369 JL	<0.378 JL	<0.371 JL	<0.372 JL	<0.364 JL
bio(2-Ethylhexyl)phthalate	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
n-Nitrodi-n-propylamine	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
n-Nitrodiphenylamine	0.333	<0.369	<0.378	<0.371	<0.372	<0.364
% Surrogate Recovery (Control Limit)						
ax-2,4,6-Trichlorophenol R% (19 - 122)	-	52.0	67.0	73.0	72.0	68.0
ax-2-Fluorobiphenyl R% (30 - 115)	-	64.0	63.1	70.9	76.1	64.0
ax-2-Fluorophenol R% (25 - 121)	-	52.0	48.1	53.1	53.0	53.0
ax-Nitrobenzene-d5 R% (23 - 120)	-	58.0	57.0	62.0	68.0	57.1
ax-Phenol-d6 R% (24 - 113)	-	62.1	54.1	59.9	60.9	55.9
ax-Terphenyl-d14 R% (18 - 137)	-	87.0	81.2	103.0	78.0	113.2

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use.

TABLE C-1

DATA SUMMARY TABLE

Artespase Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3841SA 22-OCT-95 0.0' - 2.0'	OT3842SA 22-OCT-95 0.0' - 2.0'	FDUP 04 22-OCT-95 0.0' - 2.0'	OT3843SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)						
623-9045 pH units Soil	-		7.76	7.58	7.52	7.67
PERCENT SOLID - D2116/NONE (percent)						
623-D2216 Moisture	-		9.00	12.0	3.00 J	11.0
METALS, TOTAL BY ICP/SW4010/SW1850 (mg/kg)						
Aluminum	50.0		6050	11600 J	7900 J	8860
Antimony	25.0		<18.1	1.97 JQ	2.44 JQ	<19.9
Barium	2.00		58.0	103	78.2	94.8
Beryllium	0.300		<2.32	1.58 JQ	0.610	<2.39
Cadmium	1.00		<0.724	<0.789	<0.871	<0.797
Calcium	10.0		157000	116000	92400	113000
Chromium	5.00		<38.7	10.3 JQ	7.58	<39.8
Cobalt	5.00		2.17 JQ	3.94	2.79 JQ	2.95 JQ
Copper	5.00		6.19 JQ	10.3 JQ	7.14	11.2
Iron	5.00		6530	11800 J	7260 J	9180
Magnesium	25.0		2100	2660	2260	2100
Manganese	1.00		323	527 J	318 J	403
Molybdenum	5.00		1.39 JQ	1.97 JQ	1.31 JQ	1.91 JQ
Nickel	5.00		203	60.8	7.93	59.1
Potassium	60.0		891	2190 J	1420 J	1250
Silver	5.00		<3.62	<3.94	<4.36	<3.98
Sodium	25.0		109	338	77.9	101
Thallium	25.0		<18.1	<19.7	<21.8	<19.9
Vanadium	5.00		18.1	21.0	18.2	19.9
Zinc	1.00		67.5	37.6 J	18.3 J	31.6
ARSENIC, TOTAL BY GFAA/SW 7060 (mg/kg)						
Arsenic	0.500		1.04	2.42	1.18	2.60
LEAD, TOTAL BY GFAA/SW 7431 (mg/kg)						
Lead	0.500		11.6	20.9	25.4	27.5
MERCURY, TOTAL BY CVA/SW 7471 (mg/kg)						
Mercury	0.223		<0.237	<0.269	<0.234	<0.228
SELENIUM, TOTAL BY GFAA/SW 7740/METHOD (mg/kg)						
Selenium	0.500		<2.02 JL	<0.427	<2.11	<2.06
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,1,2,2-Tetrachloroethane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,1,2-Trichloroethane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,1-Dichloroethane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,1-Dichloroethene	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,2-Dichloroethane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
1,2-Dichloropropane	0.00500		<0.00540	<0.00529	<0.00571	<0.00558
2-Butanone (MEK)	0.0100		<0.0108 J	<0.0106 J	<0.0114 J	<0.0112 J
2-Chloroethyl vinyl ether	0.0100		<0.0108	<0.0106	<0.0114	<0.0112
2-Hexanone	0.0100		<0.0108	<0.0106	<0.0114	<0.0112

TABLE C-1

DATA SUMMARY TABLE

Artesano Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)								
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (methyl rest'd)								
Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3841SA 22-OCT-95 0.0' - 2.0'	OT3842SA 22-OCT-95 0.0' - 2.0'	FDUP-04 22-OCT-95 0.0' - 2.0'	OT3843SA 22-OCT-95 0.0' - 2.0'			
					Duplicate of OT3842SA			

TABLE C-1

DATA SUMMARY TABLE
 Aerospace Museum Site
 Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD(UNIT)													
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg conc't d)													
Sample ID:	OT3841SA	OT3842SA	FDUP-04	OT3843SA									
Sample Date:	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95									
Depth:	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'									
Notes:	Duplicate of OT3842SA												
Quantitation Limits	1.67	1.67	1.67	1.67									
3-Nitroaniline	<1.80	<1.87	<1.90	<1.86									
4,6-Dinitro-2-methylphenol	<1.80	<1.87	<1.90	<1.86									
4-Bromophenyl phenyl ether	<0.361	<0.374	<0.379	<0.371									
4-Chloro-3-methylphenol	<0.361	<0.374	<0.379	<0.371									
4-Chloroaniline	<0.667	<0.722	<0.758	<0.743									
4-Chlorophenyl phenyl ether	<0.361	<0.374	<0.379	<0.371									
4-Methylphenol	<0.361	<0.374	<0.379	<0.371									
4-Nitroaniline	<1.80	<1.87	<1.90	<1.86									
4-Nitrophenol	<1.80	<1.87	<1.90	<1.86									
Acenaphthene	<0.361	<0.374	<0.379	<0.371									
Acenaphthylene	<0.361	<0.374	<0.379	<0.371									
Anthracene	<0.361	<0.374	<0.379	<0.371									
Benzo(a)anthracene	<0.361	<0.374	<0.379	<0.371									
Benzo(a)pyrene	<0.361	<0.374	<0.379	<0.371									
Benzo(b)fluoranthene	<0.361	<0.374	<0.379	<0.371									
Benzo(g,h,i)perylene	<0.361	<0.374	<0.379	<0.371									
Benzo(k)fluoranthene	<0.361	<0.374	<0.379	<0.371									
Benzoic acid	<1.80	<1.87	<1.90	<1.86									
Benzyl alcohol	<0.667	<0.722	<0.758	<0.743									
Butyl benzyl phthalate	<0.361	<0.374	<0.379	<0.371									
Chrysene	<0.361	<0.374	<0.379	<0.371									
Di-n-butylphthalate	<0.361	<0.374	<0.379	<0.371									
Dt-n-octylphthalate	<0.361	<0.374	<0.379	<0.371									
Dibenz(a,h)anthracene	<0.361	<0.374	<0.379	<0.371									
Dibenzofuran	<0.361	<0.374	<0.379	<0.371									
Diethylphthalate	<0.361	<0.374	<0.379	<0.371									
Dimethylphthalate	<0.361	<0.374	<0.379	<0.371									
Fluorene	<0.361	<0.374	<0.379	<0.371									
Hexachlorobenzene	<0.361	<0.374	<0.379	<0.371									
Hexachlorobutadiene	<0.361	<0.374	<0.379	<0.371									
Hexachlorocyclopentadiene	<0.361	<0.374	<0.379	<0.371									
Hexachloroethane	<0.361	<0.374	<0.379	<0.371									
Indeno(1,2,3-cd)pyrene	<0.361	<0.374	<0.379	<0.371									
Isochloro	<0.361	<0.374	<0.379	<0.371									
Naphthalene	<0.361	<0.374	<0.379	<0.371									
Nitrobenzene	<0.361	<0.374	<0.379	<0.371									
Pentachlorophenol	<1.00	<1.12	<1.14	<1.11									
Phenanthrene	<0.361	<0.374	<0.379	<0.371									
Phenol	<0.361	<0.374	<0.379	<0.371									
Pyrene	<0.361	<0.374	<0.379	<0.371									

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)									
Quantitation Limits	Sample ID :		Sample Date :		Sample Depth :		Notes :		
	OT3841SA	OT3842SA	OT3843SA	FDUP-04	OT3843SA	OT3843SA	OT3843SA		
	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95		
	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	Duplicate of OT3842SA	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW1705W1559 (unlabeled) conc'd									
bis(2-Chloroethoxy)methane	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
bis(2-Chloroethyl)ether	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
bis(2-Chloroisopropyl)ether	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
bis(2-Ethylhexyl)phthalate	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
n-Nitrosodipropylamine	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
n-Nitrosodiphenylamine	0.333	<0.361	<0.374	<0.379	<0.371	<0.371	<0.371	<0.371	
% Sulfonate Recovery (Control Limits)									
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	60.9	69.0	61.1	61.1	53.0	53.0	53.0	
sur-2-Fluorobiphenyl R% (30 - 115)	-	60.9	70.1	63.9	63.9	64.2	64.2	64.2	
sur-2-Fluorophenol R% (25 - 121)	-	48.0	62.0	51.1	51.1	52.1	52.1	52.1	
sur-Nitrobenzene-d5 R% (23 - 120)	-	52.9	70.1	55.9	55.9	56.1	56.1	56.1	
sur-Phenol-d6 R% (24 - 113)	-	52.0	64.0	54.0	54.0	60.0	60.0	60.0	
sur-Terphenyl-d14 R% (18 - 137)	-	69.0	108.0	69.9	69.9	87.1	87.1	87.1	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Data rejected based upon QC data; do not use

TABLE C-1

DATA SUMMARY TABLE

Artesapex Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3844SA 22-OCT-95 0.0' - 2.0'	OT3845SA 22-OCT-95 0.0' - 2.0'	OT3846SA 22-OCT-95 0.0' - 2.0'	OT3847SA 22-OCT-95 0.0' - 2.0'	OT3848SA 22-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (pH)							
623-9045 pH unit Soil			7.55	7.81	7.71	7.14	7.59
PERCENT SOLID - D2216/NONE (percent)							
623-D2216 Moisture			10.0	16.0	10.0	13.0	16.0
METALS, TOTAL BY ICP/SW 6010/SW 3659 (mg/kg)							
Aluminum	50.0		8120	13000	6110	6300	10700
Antimony	25.0		<20.7	<22.9	2.49 JQ	<19.3	<22.7
Boron	2.00		81.2	88.9	82.4	77.9	83.6
Beryllium	0.300		1.66 JQ	0.733	<2.33	<2.31	<2.73
Cadmium	1.00		<0.829	<0.916	<0.777	<0.771	<0.909
Calcium	10.0		186000	121000	179000	109000	139000
Chromium	5.00		8.29 JQ	10.8	<38.8	<38.6	<45.4
Cobalt	5.00		2.90 JQ	4.03 JQ	3.57 JQ	2.31 JQ	4.00 JQ
Copper	5.00		3.32 JQ	8.79	6.99	9.25 JQ	17.3 JQ
Iron	5.00		11200	12700	7470	6230	13200
Magnesium	25.0		2510	3150	2350	1920	2800
Manganese	1.00		455	364	474	318	479
Molybdenum	5.00		2.40 JQ	2.20 JQ	1.79 JQ	1.46 JQ	2.91 JQ
Nickel	5.00		224	9.71	206	154	242
Potassium	60.0		1920	2490	1030	927	1770
Silver	5.00		<4.14	<4.58	<3.88	<3.86	<4.54
Sodium	25.0		288	273	110	78.9	103
Thallium	25.0		<20.7	<22.9	<19.4	<19.3	<22.7
Vanadium	5.00		17.1	17.5	24.1	15.4	23.3
Zinc	1.00		87.0	28.1	69.5	89.5	204
ARSENIC, TOTAL BY GFAA/SW 7060 (mg/kg)							
Arsenic	0.500		2.36	2.57	1.96	0.982 J	3.53 J
LEAD, TOTAL BY GFAA/SW 7431 (mg/kg)							
Lead	0.500		29.0	19.6	38.4	128	580
MERCURY, TOTAL BY CYA/SW 7471 (mg/kg)							
Mercury	0.223		<0.262	<0.278	<0.256	<0.229	<0.285
SELENIUM, TOTAL BY GFAA/SW 7740/METHOD (mg/kg)							
Selenium	0.500		<0.421	<0.434	<1.90 JL	<2.18	<2.19 JL
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9249/NONE (mg/kg)							
1,1,1-Trichloroethane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
1,1,2,2-Tetrachloroethane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
1,1,2-Trichloroethane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
1,1-Dichloroethane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
1,2-Dichloroethane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
1,2-Dichloropropane	0.00500		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
2-Butanone (MEK)	0.0100		<0.00542	<0.00590	<0.00552	<0.00571	<0.00594
2-Chloroethyl vinyl ether	0.0100		<0.0108 J	<0.0118 J	<0.0110 J	<0.0114 J	<0.0119 J
2-Hexanone	0.0100		<0.0108	<0.0118	<0.0110	<0.0114	<0.0119

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Jettie Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID:			
		OT3844SA	OT3845SA	OT3846SA	OT3847SA
		22-OCT-95	22-OCT-95	22-OCT-95	22-OCT-95
		0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg, rest'd)					
4-Methyl-2-pentane	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Acetone	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Benzene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Bromochloromethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Bromoform	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Bromomethane	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Carbon disulfide	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Carbon tetrachloride	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Chlorobenzene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Chloroethane	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Chloroform	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Chloromethane	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Dibromochloromethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Ethylbenzene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Methylene chloride	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Styrene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Tetrachloroethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Toluene	0.00500	<0.0073	0.00109	0.00110	0.00195
Trichloroethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
Vinyl acetate	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Vinyl chloride	0.0100	<0.0108	<0.0118	<0.0110	<0.0114
Xylenes (total)	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
cis-1,2-Dichloroethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
cis-1,3-Dichloropropene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
trans-1,2-Dichloroethane	0.00500	<0.00542	<0.00590	<0.00552	<0.00571
trans-1,3-Dichloropropene	0.00500	<0.00542	<0.00590	<0.00552	<0.00571

% Semivolatile Recoveries (Control Limit)

sur-1,2-Dichloroethane-44 R% (70 - 121)

sur-Bromodichlorobenzene R% (74 - 121)

sur-Toluene-28 R% (81 - 117)

106.9
84.9
94.9108.1
84.9
98.1110.8
89.0
98.0106.9
84.9
94.9105.0
80.1
94.1106.9
84.9
94.9105.0
80.1
94.1106.9
84.9
94.9108.1
84.9
98.1110.8
89.0
98.0106.9
84.9
94.9

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW8260 (mg/kg)

1,2,4-Trichlorobenzene	0.333	<0.364	<0.394	<0.366	<0.379
1,2-Dichlorobenzene	0.333	<0.364	<0.394	<0.366	<0.379
1,3-Dichlorobenzene	0.333	<0.364	<0.394	<0.366	<0.379
1,4-Dichlorobenzene	0.333	<0.364	<0.394	<0.366	<0.379
2,4,5-Trichlorophenol	0.667	<0.729	<0.788	<0.733	<0.758
2,4,6-Trichlorophenol	0.333	<0.364	<0.394	<0.366	<0.379
2,4-Dichlorophenol	0.333	<0.364	<0.394	<0.366	<0.379
2,4-Dimethylphenol	0.333	<0.364	<0.394	<0.366	<0.379
2,4-Dinitrophenol	1.67	<1.82	<1.97	<1.83	<1.96
2,4-Dinitrotoluene	0.333	<0.364	<0.394	<0.366	<0.379
2,6-Dinitrotoluene	0.333	<0.364	<0.394	<0.366	<0.379
2-Chlorophthalene	0.333	<0.364	<0.394	<0.366	<0.379
2-Chlorophenol	0.333	<0.364	<0.394	<0.366	<0.379
2-Methylnaphthalene	0.333	<0.364	<0.394	<0.366	<0.379
2-Methylphenol	0.333	<0.364	<0.394	<0.366	<0.379
2-Nitroaniline	1.67	<1.82	<1.97	<1.83	<1.96
2-Nitrophenol	0.333	<0.364	<0.394	<0.366	<0.379
3,3'-Dichlorobenzidine	0.667	<0.729	<0.788	<0.733	<0.758

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carlisle Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS	Sample ID : Sample Date : Depth : Notes :	OT3844SA 22-OCT-95 0.0' - 2.0'	OT3845SA 22-OCT-95 0.0' - 2.0'	OT3846SA 22-OCT-95 0.0' - 2.0'	OT3847SA 22-OCT-95 0.0' - 2.0'	OT3848SA 22-OCT-95 0.0' - 2.0'
Quantitation Limits						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW827MSW3659 (method cont'd.)						
3-Nitroaniline	1.67	<1.82	<1.97	<1.83	<1.90	<1.96
4,6-Dinitro-2-methylphenol	1.67	<1.82	<1.97	<1.83	<1.90	<1.96
4-Bromophenyl phenyl ether	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
4-Chloro-3-methylphenol	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
4-Chloroaniline	0.667	<0.729	<0.788	<0.733	<0.758	<0.784
4-Chlorophenyl phenyl ether	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
4-Methylphenol	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
4-Nitroaniline	1.67	<1.82	<1.97	<1.83	<1.90	<1.96
4-Nitrophenol	1.67	<1.82	<1.97	<1.83	<1.90	<1.96
Acenaphthene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Acenaphthylene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Anthracene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Benz(a)anthracene	0.333	<0.364	<0.394	<0.366	0.0637 IQ	<0.392
Benz(a)pyrene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Benz(b)fluoranthene	0.333	<0.364	<0.394	<0.366	0.0644 IQ	<0.392
Benz(g,h,i)perylene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Benzofluoranthene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Benzofluoranthene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Benzic acid	1.67	<1.82	<1.97	<1.83	<1.90	<1.96
Benzyl alcohol	0.667	<0.729	<0.788	<0.733	<0.758	<0.784
Butyl benzyl phthalate	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Chrysene	0.333	<0.364	<0.394	<0.366	0.0705 IQ	<0.392
Di-n-butylphthalate	0.333	<0.364	<0.394	<0.366	0.0254 IQ	<0.392
Di-n-octylphthalate	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Dibenz(a,h)anthracene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Dibenzofuran	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Diethylphthalate	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Dimethylphthalate	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Fluoranthene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Fluorene	0.333	0.0340 IQ	<0.394	<0.366	<0.379	0.0396 IQ
Hexachlorobenzene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Hexachlorobutadiene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Hexachlorocyclopentadiene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Hexachloroethane	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Indeno(1,2,3-cd)pyrene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Isophorone	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Naphthalene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Nitrobenzene	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Pentachlorophenol	1.00	<1.09	<1.18	<1.10	<1.18	<0.392
Phenanthrene	0.333	<0.364	<0.394	<0.366	0.0443 IQ	<0.392
Phenol	0.333	<0.364	<0.394	<0.366	<0.379	<0.392
Pyrene	0.333	0.0269 IQ	<0.394	<0.366	0.142	0.0549 IQ

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS									
Quantitation Limits	Sample ID :		Sample Date :		Sample ID :		Sample Date :		Notes :
	Depth :		Depth :		Depth :		Depth :		
	Notes :		Notes :		Notes :		Notes :		
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (method rev'd)									
bis(2-Chloroethoxy)methane	0.333	<0.364	<0.394	<0.366	<0.379	<0.392			
bis(2-Chloroethyl)ether	0.333	<0.364	<0.394	<0.366	<0.379	<0.392			
bis(2-Chloroisopropyl)ether	0.333	<0.364 JL	<0.394 JL	<0.366 JL	<0.379 JL	<0.392 JL			
bis(2-Ethylhexyl)phthalate	0.333	<0.364	<0.394	<0.366	<0.379	0.136 JQ			
n-Nitrosodi-n-propylamine	0.333	<0.364	<0.394	<0.366	<0.379	<0.392			
n-Nitrosodiphenylamine	0.333	<0.364	<0.394	<0.366	<0.379	<0.392			
% Surrogate Recovery (Control Limit)									
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	51.9	60.1	58.0	60.0	65.0			
sur-2-Fluorobiphenyl R% (30 - 115)	-	59.1	65.0	64.9	59.9	65.1			
sur-2-Fluorophenol R% (25 - 121)	-	45.9	55.0	54.0	49.1	49.0			
sur-Nitrobenzene-d5 R% (23 - 120)	-	48.1	61.9	58.0	50.1	52.0			
sur-Phenol-d6 R% (24 - 113)	-	47.0	56.0	56.9	60.0	56.0			
sur-Terphenyl-d14 R% (18 - 137)	-	62.1	100.0	72.8	86.0	91.1			

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	FDUP-05 22-OCT-95 0.0' - 2.0' Duplicate of OT3848SA	OT3849SA 22-OCT-95 0.0' - 2.0'	OT3850SA 23-OCT-95 0.0' - 2.0' Background	OT3851SA 23-OCT-95 0.0' - 2.0' Background
SOIL pH - SW9445/NONE (pH)						
623-9045 pH unit Soil			7.72	7.76	7.70	7.33
PERCENT SOLID - D2116/NONE (percent)						
623-D2116 Moisture			17.0	4.00	12.0	6.00
METALS, TOTAL BY ICP/SW610/SW2050 (mg/kg)						
Aluminum	50.0		7970	2550	5120	3650
Antimony	25.0		2.79 IQ	<18.1	1.99 JL	<18.0
Beryllium	2.00		82.0	28.9	57.2	53.1
Cadmium	0.300		<2.46	<2.17	<2.60	0.216
Calcium	1.00		<0.820	<0.723	<0.867 JL	<0.719
Chromium	10.0		138000	180000	170000	75900
Cobalt	5.00		<41.0	<36.2	<43.4	10.8
Copper	5.00		410	1.66 IQ	2.17 IQ	3.45 IQ
Iron	5.00		131 IQ	<36.2	6.07 IQ	6.90
Magnesium	5.00		10900	4740	7040	5110
Manganese	25.0		2420	1650	2000	1080
Molybdenum	1.00		512	338	346	229
Nickel	5.00		1.80 IQ	<3.62	1.91 JL	<3.60
Potassium	60.0		219	191	230	5.75
Silver	5.00		1430	653	1160	967 JH
Sodium	5.00		<41.0	<3.62	<4.34	0.431 IQ
Thallium	25.0		95.0	173	135	75.9 JB
Vanadium	25.0		<20.5	<18.1	<21.7	<18.0
Zinc	5.00		21.4	8.68	14.5	12.2
	1.00		218	62.8	110	43.1
ARSENIC, TOTAL BY GF/AASW 7060 (mg/kg)						
Arsenic	0.500		5.48 J	2.25	2.31 JL	1.69
LEAD, TOTAL BY GF/AASW 7431 (mg/kg)						
Lead	0.500		722	13.9	52.3	96.3
MERCURY, TOTAL BY CVAA/SW 7471 (mg/kg)						
Mercury	0.223		<0.241	<0.213	<0.234	<0.246
SELENIUM, TOTAL BY GF/AASW 7740/METHOD (mg/kg)						
Selenium	0.500		<2.08 JL	<0.386 JL	<0.424 JL	<0.400
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,1,2,2-Tetrachloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,1,2-Trichloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,1-Dichloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,1-Dichloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,2-Dichloroethane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
1,2-Dichloropropane	0.00500		<0.00598	<0.00562	<0.00558	<0.00532
2-Butanone (MEK)	0.0100		<0.0120 J	<0.0112	<0.00558	<0.00532
2-Chloroethyl vinyl ether	0.0100		<0.0120	<0.0112 R	<0.0112 R	<0.0106 J
2-Hexanone	0.0100		<0.0120	<0.0112 J	<0.0112 J	<0.0106

TABLE C-1

DATA SUMMARY TABLE

Aerospace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)						
Quantitation Limits	Sample ID :		Notes :	Duplicate of OT3848SA	Background Sample	Background Sample
	Sample Date :					
	Depth :					
		FDUP-05	OT3849SA	OT3850SA	OT3851SA	
		22-OCT-95	22-OCT-95	23-OCT-95	23-OCT-95	
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg soil)						
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	0.000615	0.00763	0.000918	0.0002	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	0.000615	0.00763	0.000918	0.0002	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.0100	<0.0120	<0.0112	<0.0112	<0.0112	<0.0106
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
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	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532
	0.00500	<0.00598	<0.00562	<0.00558	<0.00558	<0.00532

TABLE C-1

DATA SUMMARY TABLE

Artesians Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID:			Background Sample
		Sample Date:	Depth:	Notes:	
		FDUP-05	OT3849SA	OT3850SA	OT3851SA
		22-OCT-95	22-OCT-95	23-OCT-95	23-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
		Duplicate of OT3848SA			
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS... SW7270/SW3550 (mg/kg) cont'd					
3-Nitroaniline	1.67	<1.99	<1.73	<1.88	<1.77
4,6-Dinitro-2-methylphenol	1.67	<1.99	<1.73	<1.88	<1.77
4-Bromophenyl phenyl ether	0.333	<0.397	<0.345	<0.376	<0.354
4-Chloro-3-methylphenol	0.333	<0.397	<0.345	<0.376	<0.354
4-Chloroaniline	0.667	<0.795	<0.690	<0.753	<0.708
4-Chlorophenyl phenyl ether	0.333	<0.397	<0.345	<0.376	<0.354
4-Methylphenol	0.333	<0.397	<0.345	<0.376	<0.354
4-Nitroaniline	1.67	<1.99	<1.73	<1.88	<1.77
4-Nitrophenol	1.67	<1.99	<1.73	<1.88	<1.77
Acenaphthene	0.333	<0.397	<0.345	<0.376	0.0605 IQ
Acenaphthylene	0.333	<0.397	<0.345	<0.376	<0.354
Anthracene	0.333	<0.397	<0.345	<0.376	0.128 IQ
Benzo(b)anthracene	0.333	<0.397	<0.345	<0.376	0.449
Benzo(a)pyrene	0.333	<0.397	<0.345	<0.376	0.479 J
Benzo(b)fluoranthene	0.333	<0.397	<0.345	<0.376	0.442 J
Benzo(g,h,i)perylene	0.333	<0.397	<0.345	<0.376	0.129 J
Benzo(k)fluoranthene	0.333	<0.397	<0.345	<0.376	0.593 J
Benzoic acid	1.67	<1.99	<1.73	<1.88	<1.77
Benzyl alcohol	0.667	<0.795	<0.690	<0.753	<0.708
Butyl benzyl phthalate	0.333	<0.397	<0.345	<0.376	<0.354
Caryophyllene	0.333	<0.397	<0.345	<0.376	0.399
Di-n-butylphthalate	0.333	<0.397	<0.345	<0.376	0.0282 IQ
Di-n-octylphthalate	0.333	<0.397	<0.345	<0.376	<0.354 J
Dibenz(a,h)anthracene	0.333	<0.397	<0.345	<0.376	0.107 J
Dibenzofuran	0.333	<0.397	<0.345	<0.376	<0.354
Diethylphthalate	0.333	<0.397	<0.345	<0.376	<0.354
Dimethylphthalate	0.333	<0.397	<0.345	<0.376	<0.354
Fluorene	0.333	<0.397	<0.345	<0.376	0.658
Hexachlorobenzene	0.333	0.0688 IQ	<0.345	<0.376	0.0442 IQ
Hexachlorobutadiene	0.333	<0.397	<0.345	<0.376	<0.354
Hexachlorocyclopentadiene	0.333	<0.397	<0.345	<0.376	<0.354
Hexachloroethane	0.333	<0.397	<0.345	<0.376	<0.354 J
Indeno(1,2,3-cd)pyrene	0.333	<0.397	<0.345	<0.376	<0.354
Isoptorone	0.333	<0.397	<0.345	<0.376	0.264 J
Naphthalene	0.333	<0.397	<0.345	<0.376	<0.354
Nitrobenzene	0.333	<0.397	<0.345	<0.376	<0.354
Pentachlorophenol	1.00	<1.19	<1.04	<1.13	<1.06
Phenanthrene	0.333	0.0266 IQ	<0.345	<0.376	0.508
Phenol	0.333	<0.397	<0.345	<0.376	<0.354
Pyrene	0.333	0.0795 IQ	<0.345	<0.376	0.910

TABLE C-1

DATA SUMMARY TABLE

Airspace Museum Site
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)						
Quantitation Limits	Sample ID :	FDUP-05	OT3849SA	OT3850SA	OT3851SA	Sample
	Sample Date :	22-OCT-95	22-OCT-95	23-OCT-95	23-OCT-95	
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	
Notes :	Duplicate of OT3848SA					
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg) conc'd.						
		<0.397	<0.345	<0.376	<0.354	
	bio(2-Chloroethoxy)methane	<0.397	<0.345	<0.376	<0.354	
	bio(2-Chloroethyl)ether	<0.397 IL	<0.345 IL	<0.376 IL	<0.354 IL	
	bio(2-Chloroisopropyl)ether	<0.397	<0.345	<0.376	0.237 IQ	
	bio(2-Ethylhexyl)phthalate	<0.397	<0.345	<0.376	<0.354	
	n-Nitrosodi-n-propylamine	<0.397	<0.345	<0.376	<0.354	
	n-Nitrosodiphenylamine					
% Surrogate Recovery (Control Limit)						
-	sur-2,4,6-Trichlorophenol R% (19 - 122)	64.9	65.1	70.0	75.0	
-	sur-2-Fluorobiphenyl R% (30 - 115)	66.0	62.0	60.9	70.9	
-	sur-2-Fluorophenol R% (25 - 121)	50.0	43.1	45.0	58.9	
-	sur-Nitrobenzene-d5 R% (23 - 120)	53.1	51.0	52.1	61.9	
-	sur-Phenol-d6 R% (24 - 113)	56.0	51.0	51.1	62.0	
-	sur-Terphenyl-d14 R% (18 - 137)	88.2	75.1	87.0	113.0	

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
 JB = Estimated quantitation; possibly biased high or a false positive based upon blank data
 JH = Estimated quantitation; possibly biased high based upon QC data
 JL = Estimated quantitation; possibly biased low or a false negative based upon QC data
 JQ = Estimated quantitation; detected below the Practical Quantitation Limit
 R = Datum rejected based upon QC data; do not use.

PREPARED/DATE: John Peacor/2-22-96

CHECKED/DATE: Sue Maxwell/2-22-96

APPENDIX C-2

GROUNDS MAINTENANCE YARD

TABLE C-2

DATA SUMMARY TABLE
Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3901SA 23-OCT-95 0.0' - 2.0' Background Sample	OT3902SA 23-OCT-95 0.0' - 2.0' Background Sample	OT3903SA 23-OCT-95 0.0' - 2.0'	OT3904SA 23-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)						
623-9045 pH units Soil		7.49	7.81	7.65	7.66	
PERCENT SOLID - D2216 /NONE (percent)						
623-D2216 Moisture		13.0	16.0	20.0	17.0	
METALS, TOTAL BY ICPSW6019/SW3059 (mg/kg)						
Aluminum	50.0	7850	9440	7090	4370	
Antimony	25.0	<19.8	<21.0	<23.0	<22.3	
Barium	2.00	95.3	122	121	170	
Beryllium	0.300	0.634	<2.51	0.551	<2.68	
Cadmium	1.00	<0.793	<0.838	<0.919	<0.892	
Calcium	10.0	19000	106000	106000	234000	
Chromium	5.00	9.28	<41.9	2.85 JQ	14.3 JQ	
Cobalt	5.00	3.57 JQ	2.77 JQ	3.22 JQ	2.14 JQ	
Copper	5.00	9.04	5.87 JQ	8.91	8.03 JQ	
Iron	5.00	10800	7090	6680	4200	
Magnesium	25.0	1790	2370	2390	2250	
Manganese	1.00	333	334	315	384	
Molybdenum	5.00	1.43 JQ	1.59 JQ	<4.60	<4.46	
Nickel	5.00	8.72	114	7.35	235	
Potassium	60.0	2170 JH	1480	1500	1100 JH	
Silver	5.00	<3.96	<4.19	<4.60	<4.46	
Sodium	25.0	52.0 JB	70.6	87.9	151	
Thallium	5.00	<19.8	<21.0	<23.0	<22.3	
Vanadium	5.00	15.4	17.4	9.93	6.87	
Zinc	1.00	20.4	44.2	17.3	78.5	
ARSENIC, TOTAL BY GFAS/SW 7040 (mg/kg)						
Arsenic	0.500	2.23	1.82	1.95	1.47	
LEAD, TOTAL BY GFAS/SW 7421 (mg/kg)						
Lead	0.500	12.4	10.1	15.5 JH	5.87	
MERCURY, TOTAL BY CVAS/SW 7471 (mg/kg)						
Mercury	0.185	<0.264	<0.251	<0.293	<0.284	
SELENIUM, TOTAL BY GFAS/SW 7740/METHOD (mg/kg)						
Selenium	0.500	<0.426 JL	<2.16	<2.35 JL	<2.18 JL	
ORGANOCHLORINE PESTICIDES AND PCBs - SW9945/SW3550 (mg/kg)						
4,4'-DDD	0.00333	<0.00382	<0.00400	<0.00412	<0.00413	
4,4'-DDE	0.00133	<0.00153	<0.00160	<0.00165	<0.00165	
4,4'-DDT	0.00333	<0.00382	<0.00400	<0.00412	<0.00413	
ARI016	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	
ARI221	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	
ARI232	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	
ARI242	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	
ARI248	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	
ARI254	0.0333	<0.0382	<0.0400	<0.0412	<0.0413	

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3901 SA 23-OCT-95 0.0 - 2.0' Background Sample	OT3902 SA 23-OCT-95 0.0 - 2.0' Background Sample	OT3903 SA 23-OCT-95 0.0 - 2.0'	OT3904 SA 23-OCT-95 0.0 - 2.0'
ORGANOCHLORINE PESTICIDES AND PCBs - SW8060/SW3550 (mg/kg) (cont'd)						
AR1260	0.0333		<0.0382	<0.0400	<0.0412	<0.0413
Aldrin	0.00133		<0.00153	<0.00160	<0.00165	<0.00165
Chlordane	0.0166		<0.0191	<0.0206	<0.0206	<0.0206
Dieldrin	0.000666		<0.000764	<0.000800	<0.000824	0.000873
Endosulfan I	0.00166		<0.00191	<0.00200	<0.00206	<0.00206
Endosulfan II	0.00133		<0.00153	<0.00160	<0.00165	<0.00165
Endosulfan sulfate	0.00333		<0.00382	<0.00400	<0.00412	<0.00413
Endrin	0.00200		<0.00229	<0.00240	<0.00247	<0.00248
Endrin aldehyde	0.00333		<0.00382	<0.00400	<0.00412	<0.00413
Heptachlor	0.000999		<0.00115	<0.00120	<0.00124	<0.00124
Heptachlor epoxide	0.00166		<0.00191	<0.00200	<0.00206	<0.00206
Methoxyvelter	0.0166		<0.0191	<0.0206	<0.0206	<0.0206
Toxaphene	0.0666		<0.0764	<0.0800	<0.0824	<0.0826
alpha-BHC	0.000999		<0.00115	<0.00120	<0.00124	<0.00124
beta-BHC	0.00166		<0.00191	<0.00200	<0.00206	<0.00206
delta-BHC	0.00166		<0.00191	<0.00200	<0.00206	<0.00206
gamma-BHC (Lindane)	0.00133		<0.00153	<0.00160	<0.00165	<0.00165
% Saccharin Reservoir (Control Limit)						
sur-Dibutylchloride R% (10 - 181)	-		25.0	7.0	10.0	29.0
sur-TCMX R% (18 - 145)	-		72.5	76.3	80.6	76.4
CHLORINATED HERBICIDES - SW8150 METHOD (mg/kg)						
2,4,5-T	0.00400		<0.00460	<0.00454	<0.00482	<0.00498
2,4,5-TP (Silvest)	0.00400		<0.00460	<0.00454	<0.00482	<0.00498
2,4-D	0.0400		<0.0460	<0.0454	<0.0482	<0.0498
2,4-DB	0.0600		<0.0690	<0.0681	<0.0723	<0.0747
Dalapon	0.140		<0.161	<0.159	<0.169	<0.174
Dicamba	0.00400		<0.00460	<0.00454	<0.00482	<0.00498
Dichloroprop	0.0400		<0.0460	<0.0454	<0.0482	<0.0498
Dinoseb	0.0140		<0.0161	<0.0159	<0.0169	<0.0174
MCPA	3.00		<3.45	<3.40	<3.62	<3.74
MCPP	3.00		<3.45	<3.40	<3.62	<3.74
% Saccharin Reservoir (Control Limit)						
sur-DCAA R% (0 - 191)	-		66.1	51.3	51.8	52.1
VOLEATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)						
1,1,1-Trichloroethane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,1,2,2-Tetrachloroethane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,1,2-Trichloroethane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,1-Dichloroethane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,2-Dichloroethane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,2-Dichloropropane	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
1,2-Dichlorobenzene	0.00500		<0.00591	<0.00586	<0.00619	<0.00604
2-Butanone (MEK)	0.0100		<0.0118	<0.0117	<0.0124	<0.0121
2-Chloroethyl vinyl ether	0.0100		<0.0118	<0.0117	<0.0124	<0.0121
2-Hexanone	0.0100		<0.0118	<0.0117	<0.0124	<0.0121
4-Methyl-2-pentanone	0.0100		<0.0118	<0.0117	<0.0124	<0.0121

TABLE C-3

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Jett Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID :			Background Sample	Background Sample	Background Sample	Background Sample
		OT3901SA	OT3902SA	OT3903SA				
		23-OCT-95	23-OCT-95	23-OCT-95				
		Depth :	Depth :	Depth :				
		Notes :	Notes :	Notes :				
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'				
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7270/NONE (mg/kg soil)								
Acetone	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Benzene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Bromodichloromethane	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Bromoform	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Bromomethane	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Carbon disulfide	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Carbon tetrachloride	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Chlorobenzene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Chloroethane	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Chloroform	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Chloromethane	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Dibromochloromethane	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Ethylbenzene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Methylene chloride	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Styrene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Tetrachloroethene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Toluene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Trichloroethene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
Vinyl acetate	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Vinyl chloride	0.0100	<0.0118	<0.0117	<0.0124	<0.0117	<0.0124	<0.0121	<0.0121
Xylenes (total)	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
cis-1,2-Dichloroethene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
cis-1,3-Dichloropropene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
trans-1,2-Dichloroethene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
trans-1,3-Dichloropropene	0.00500	<0.00591	<0.00586	<0.00619	<0.00586	<0.00619	<0.00604	<0.00604
% Sulfate Recovery (Control Limit)								
sur-1,2-Dichloroethene-44 R% (70 - 121)	-	104.9	114.0	109.0	114.0	109.0	106.0	106.0
sur-Bromodichloroethene R% (74 - 121)	-	87.0	95.1	84.0	95.1	84.0	93.0	93.0
sur-Toluene-28 R% (81 - 117)	-	100.0	100.0	99.0	100.0	99.0	103.0	103.0
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW7270/SW3556 (mg/kg)								
1,2,4-Trichlorobenzene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
1,2-Dichlorobenzene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
1,3-Dichlorobenzene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
1,4-Dichlorobenzene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2,4,5-Trichlorophenol	0.667	<0.759	<0.782	<0.824	<0.782	<0.824	<0.800	<0.800
2,4,6-Trichlorophenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2,4-Dichlorophenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2,4-Dimethylphenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2,4-Dinitrophenol	1.67	<1.90	<1.96	<2.06	<1.96	<2.06	<2.00	<2.00
2,4-Dinitrotoluene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2,6-Dinitrotoluene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2-Chloronaphthalene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2-Chlorophenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2-Methylnaphthalene	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2-Methylphenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400
2-Nitroaniline	1.67	<1.90	<1.96	<2.06	<1.96	<2.06	<2.00	<2.00
2-Nitrophenol	0.333	<0.380	<0.391	<0.412	<0.391	<0.412	<0.400	<0.400

DATA SUMMARY TABLE

**Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas**

PARAMETER/METHOD/UNITS		Sample ID : Sample Date : Depth : Notes :	OT3901SA 23-OCT-95 0.0' - 2.0'	OT3902SA 23-OCT-95 0.0' - 2.0'	OT3903SA 23-OCT-95 0.0' - 2.0'	OT3904SA 23-OCT-95 0.0' - 2.0'
Quantitation Limits			Background Sample	Background Sample		
0.667			<0.759 J	<0.782 J	<0.824 J	<0.800 J
1.67	1,3-Dichlorobenzene		<1.90	<1.96	<2.06	<2.00
1.67	1,3-Nitrobenzene		<1.90	<1.96	<2.06	<2.00
0.333	4,6-Dinitro-2-methylphenol		<0.380	<0.391	<0.412	<0.400
0.333	4-Bromophenyl phenyl ether		<0.380	<0.391	<0.412	<0.400
0.667	4-Chloro-3-methylphenol		<0.759	<0.782 J	<0.824 J	<0.800
0.333	4-Chloroaniline		<0.380	<0.391	<0.412	<0.400
0.333	4-Chlorophenyl phenyl ether		<0.380	<0.391	<0.412	<0.400
0.333	4-Methylphenol		<0.380	<0.391	<0.412	<0.400
1.67	4-Nitrobenzene		<1.90	<1.96	<2.06	<2.00
1.67	4-Nitrophenol		<1.90	<1.96 J	<2.06 J	<2.00
0.333	Acenaphthene		<0.380	<0.391	<0.412	<0.400
0.333	Acenaphthylene		<0.380	<0.391	<0.412	<0.400
0.333	Anthracene		<0.380	<0.391	<0.412	<0.400
0.333	Benz(a)anthracene		<0.380	<0.391	<0.412	<0.400
0.333	Benz(a)pyrene		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Benz(b)fluoranthene		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Benz(g,h,i)perylene		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Benz(k)fluoranthene		<0.380 J	<0.391	<0.412	<0.400 J
1.67	Benzoic acid		<1.90	<1.96	<2.06	<2.00
0.667	Benzyl alcohol		<0.759	<0.782	<0.824	<0.800
0.333	Butyl benzyl phthalate		<0.380	<0.391	<0.412	<0.400 J
0.333	Chrysene		<0.380	<0.391	<0.412	<0.400 J
0.333	Di-n-butylphthalate		0.0276 IQ	<0.391	<0.412	<0.400
0.333	Di-n-octylphthalate		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Dibenz(a,h)anthracene		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Dibenzofuran		<0.380	<0.391	<0.412	<0.400
0.333	Diethylphthalate		<0.380	<0.391	<0.412	<0.400
0.333	Dimethylphthalate		<0.380	<0.391	<0.412	<0.400
0.333	Fluorene		<0.380	<0.391	<0.412	<0.400
0.333	Hexachlorobenzene		<0.380	<0.391	<0.412	<0.400
0.333	Hexachlorobutadiene		<0.380	<0.391	<0.412	<0.400
0.333	Hexachlorocyclopentadiene		<0.380	<0.391	<0.412	<0.400
0.333	Hexachlorodibenz		<0.380	<0.391	<0.412	<0.400
0.333	Indeno(1,2,3-cd)pyrene		<0.380 J	<0.391	<0.412	<0.400 J
0.333	Iscophorone		<0.380	<0.391	<0.412	<0.400
0.333	Naphthalene		<0.380	<0.391	<0.412	<0.400
0.333	Nitrobenzene		<0.380	<0.391	<0.412	<0.400
1.00	Pentachlorophenol		<1.14	<1.17	<1.24	<1.20
0.333	Phenanthrene		<0.380	<0.391	<0.412	<0.400
0.333	Phenol		<0.380	<0.391	<0.412	<0.400
0.333	Pyrene		<0.380	<0.391	<0.412	<0.400 J

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :		OT3901SA 23-OCT-95 0.0' - 2.0' Background Sample	OT3902SA 23-OCT-95 0.0' - 2.0' Background Sample	OT3903SA 23-OCT-95 0.0' - 2.0' Background Sample	OT3904SA 23-OCT-95 0.0' - 2.0' Background Sample
		Sample Date :	Depth :				
		Notes :					
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW1650 (mL/Soil) conc'd.							
bio(2-Chloroethoxy)methane	0.333			<0.380	<0.391	<0.412	<0.400
bio(2-Chloroethyl)ether	0.333			<0.380	<0.391	<0.412	<0.400
bio(2-Chloroisopropyl)ether	0.333			<0.380 JL	<0.391 JL	<0.412 JL	<0.400 JL
bio(2-Ethylhexyl)phthalate	0.333			<0.380	<0.391	<0.412	<0.400 J
n-Nitrosodi-n-propylamine	0.333			<0.380	<0.391	<0.412	<0.400
n-Nitrosodiphenylamine	0.333			<0.380	<0.391	<0.412	<0.400
% Sulfonate Recovery (Control Limit)							
sur-2,4,6-Trichlorophenol R% (19 - 122)	-			60.9	61.1	68.0	53.0
sur-2-Fluorobiphenyl R% (30 - 115)	-			66.8	63.9	68.9	70.0
sur-2-Fluorophenol R% (25 - 121)	-			56.0	51.0	57.9	55.0
sur-Nitrobenzene-d5 R% (23 - 120)	-			56.1	57.0	61.9	55.0
sur-Phenol-d6 R% (24 - 113)	-			54.0	56.0	62.0	52.0
sur-Terphenyl-d14 R% (18 - 137)	-			112.9	70.1	78.9	93.0

Data Qualification Flags/Notes:

J - Estimated quantitation based upon QC data
JB - Estimated quantitation: possibly biased high or a false positive based upon blank data
JH - Estimated quantitation: possibly biased high based upon QC data
JL - Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ - Estimated quantitation: detected below the Practical Quantitation Limit
R - Datum rejected based upon QC data; do not use.

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID			
		Sample Date	Depth	Notes	
SOIL pH - SW9045/NONE (none)	-				
623-9045 pH units Soil		7.72	7.61	7.59	7.90
PERCENT SOLID - D2116 /NONE (percent)	-				
623-D2216 Moisture		16.0	23.0	20.0	18.0
METALS, TOTAL BY ICF/SW4610/SW3656 (mg/kg)					
Aluminum	50.0	4300	5140	4060	4580
Antimony	25.0	<22.7	<23.9	<22.6	<22.8
Barium	2.00	118	179	142	152
Beryllium	0.300	<2.73	<2.86	<2.72	<2.73
Cadmium	1.00	<0.909	<0.955	<0.906	<0.910
Calcium	10.0	204000	296000	214000	269000
Chromium	5.00	32.7	<47.8	10.8	<45.5
Cobalt	5.00	2.27	1.15	1.54	1.36
Copper	5.00	19.1	24.8	9.06	7.28
Iron	5.00	5410	4550	4210	3750
Magnesium	25.0	1420	1770	1450	1420
Manganese	1.00	340	271	332	271
Molybdenum	5.00	1.91	1.43	<4.53	<4.55
Nickel	5.00	242	153	239	243
Potassium	60.0	1010	869	1370	831
Silver	5.00	<4.54	<4.78	<4.53	<4.55
Sodium	25.0	349	180	144	130
Thallium	25.0	<22.7	<23.9	<22.6	<22.8
Vanadium	5.00	9.64	8.40	6.80	4.64
Zinc	1.00	99.0	53.2	91.4	73.5
ARSENIC, TOTAL BY GFAS/SW 7656 (mg/kg)	0.500	1.61	0.801	1.69	0.456
Arsenic					
LEAD, TOTAL BY GFAS/SW 7421 (mg/kg)	0.500	71.9	10.1	44.6	5.92
Lead					
MERCURY, TOTAL BY CYA/SW 7471 (mg/kg)	0.185	<0.266	<0.310	<0.244	<0.272
Mercury					
SELENIUM, TOTAL BY GFAS/SW 7740/METHOD (mg/kg)	0.500	<0.454	0.310	<0.33	0.478
Selenium					
ORGANOCHLORINE PESTICIDES AND PCBs - SW/8080/SW1550 (mg/kg)					
4,4'-DDD	0.00333	<0.00400	<0.00405	<0.00414	<0.00403
4,4'-DDE	0.00133	<0.00160	<0.00162	<0.00166	<0.00161
4,4'-DDT	0.00333	<0.00400	<0.00405	<0.00414	<0.00403
ARI016	0.0333	<0.0400	<0.0405	<0.0414	<0.0403
ARI221	0.0333	<0.0400	<0.0405	<0.0414	<0.0403
ARI232	0.0333	<0.0400	<0.0405	<0.0414	<0.0403
ARI242	0.0333	<0.0400	<0.0405	<0.0414	<0.0403
ARI248	0.0333	<0.0400	<0.0405	<0.0414	<0.0403
ARI254	0.0333	<0.0400	<0.0405	<0.0414	<0.0403

TABLE C-2

DATA SUMMARY TABLE

Grossed Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3906SA 23-OCT-95 0.0' - 2.0'	OT3907SA 23-OCT-95 0.0' - 2.0'	OT3908SA 24-OCT-95 0.0' - 2.0'
ORGANOCHLORINE PESTICIDES AND PCBs - SW8060/SW3550 (mg/kg) cont'd.					
AR1260	0.0333		<0.0400	<0.0414	<0.0403
Aldrin	0.00133		<0.00160	<0.00166	<0.00161
Chlordane	0.0166		<0.0200	<0.0202	<0.0202
Dieldrin	0.000666		<0.000800	<0.000828	<0.000806
Endosulfan I	0.00166		<0.00200	<0.00207	<0.00202
Endosulfan II	0.00133		<0.00160	<0.00166	<0.00161
Endosulfan sulfate	0.00333		<0.00400	<0.00405	<0.00403
Endrin	0.00200		<0.00240	<0.00248	<0.00242
Endrin aldehyde	0.00333		<0.00400	<0.00414	<0.00403
Heptachlor epoxide	0.000999		<0.00120	<0.00124	<0.00121
Heptachlor	0.00166		<0.00200	<0.00207	<0.00202
Methoxychlor	0.0166		<0.0200	<0.0207	<0.0202
Toxaphene	0.0666		<0.0800	<0.0828	<0.0806
alpha-BHC	0.000999		<0.00120	<0.00124	<0.00121
beta-BHC	0.00166		<0.00200	<0.00207	<0.00202
delta-BHC	0.00166		<0.00200	<0.00207	<0.00202
gamma-BHC (Lindane)	0.00133		<0.00160	<0.00166	<0.00161
% Surrogate Recovery (Control Limit)					
sur-Dibutylchloronate R% (10 - 181)	-	14.0	26.0	80.9	16.0
sur-TCMX R% (18 - 145)	-	71.3	77.2	-	77.0
CHLORINATED HERBICIDES - SW8160/METHOD (mg/kg)					
2,4,5-T	0.00400	<0.00482	<0.00494	<0.00500	<0.00488
2,4,5-TP (Silvex)	0.00400	<0.00482	<0.00494	<0.00500	<0.00488
2,4-D	0.0400	<0.0482	<0.0494	<0.0500	<0.0488
2,4-DB	0.0600	<0.0723	<0.0741	<0.0750	<0.0732
Dalapon	0.140	<0.169 J	<0.173 J	<0.175	<0.171
Dicamba	0.00400	<0.00482 IL	<0.00494 IL	<0.00500 IL	<0.00488
Dichloroprop	0.0400	<0.0482	<0.0494	<0.0500	<0.0488 J
Dioprob	0.0140	<0.0169	<0.0173	<0.0175	<0.0171
MCPA	3.00	<3.62	<3.70	<3.75	<3.66
MCPP	3.00	4.05	<3.70	<3.75	<3.66
% Surrogate Recovery (Control Limit)					
sur-DCAA R% (0 - 191)	-	49.0	51.0	44.8	40.0
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)					
1,1,1-Trichloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,1,2,2-Tetrachloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,1,2-Trichloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,1-Dichloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,1-Dichloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,2-Dichloroethane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
1,2-Dichloropropane	0.00500	<0.00596	<0.00606	<0.00624	<0.00606
2-Butanone (MEK)	0.0100	<0.0119 J	<0.0121	<0.0125	<0.0121
2-Chloroethyl vinyl ether	0.0100	<0.0119	<0.0121 R	<0.0125 J	<0.0121
2-Hexanone	0.0100	<0.0119	<0.0121 J	<0.0125	<0.0121 J
4-Methyl-2-pentanone	0.0100	<0.0119	<0.0121	<0.0125	<0.0121

TABLE C-3

DATA SUMMARY TABLE

Grand Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)							
Quantitation Limits	Sample ID :		Notes :	OT3905SA 23-OCT-95 0.0' - 2.0'	OT3906SA 23-OCT-95 0.0' - 2.0'	OT3907SA 23-OCT-95 0.0' - 2.0'	OT3908SA 24-OCT-95 0.0' - 2.0'
	Sample Date :	Depth :					
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg) cont'd							
Acetone	0.0100	<0.0119 J		<0.0121 J	<0.0125 J	<0.0125	<0.0121
Benzene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Bromochloromethane	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Bromoforn	0.00500	<0.00596		<0.0121	<0.0125	<0.0125	<0.0121
Bromomethane	0.0100	<0.0119		<0.00606	<0.00624	<0.00624	0.000610 JQ
Carbon disulfide	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Carbon tetrachloride	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Chlorobenzene	0.00500	<0.00596		<0.0119 J	<0.0125 J	<0.0125	<0.0121
Chloroethane	0.0100	<0.0119		<0.00606	<0.00624	<0.00624	<0.00606
Chloroform	0.00500	<0.00596		<0.0121	<0.0125	<0.0125	<0.0121
Chloromethane	0.0100	<0.0119		<0.00606	<0.00624	<0.00624	<0.00606
Dibromochloromethane	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Ethylbenzene	0.00500	<0.00596		0.00410	<0.00624	<0.00624	<0.00606
Methylene chloride	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Styrene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
Tetrachloroethene	0.00500	<0.00596		0.000727	<0.00624	<0.00624	<0.00501 JQ
Toluene	0.00500	0.0165		<0.00596	<0.00624	<0.00624	<0.00606
Trichloroethene	0.00500	<0.00596		<0.0121	<0.0125	<0.0125	<0.0121 J
Vinyl acetate	0.0100	<0.0119		<0.0121	<0.0125	<0.0125	<0.0121
Vinyl chloride	0.0100	<0.0119		<0.00606	<0.00624	<0.00624	<0.00606
Xylenes (total)	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
cis-1,2-Dichloroethene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
cis-1,3-Dichloropropene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
trans-1,2-Dichloroethene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
trans-1,3-Dichloropropene	0.00500	<0.00596		<0.00606	<0.00624	<0.00624	<0.00606
% Spiked Recovery (Central Limit)							
sur-1,2-Dichloroethane-d4 R% (70 - 121)	-	106.1		106.9	107.1	110.1	
sur-Bromofluorobenzene R% (74 - 121)	-	97.1		89.9	95.0	93.1	
sur-Toluene-d8 R% (81 - 117)	-	95.1		100.0	103.0	102.0	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg)							
1,2,4-Trichlorobenzene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
1,2-Dichlorobenzene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
1,3-Dichlorobenzene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
1,4-Dichlorobenzene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2,4,5-Trichlorophenol	0.667	<0.786		<0.863	<0.826	<0.812	<0.812
2,4,6-Trichlorophenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2,4-Dichlorophenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2,4-Dimethylphenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2,4-Dinitrophenol	1.67	<1.96		<2.16 J	<2.06 J	<2.03 J	<2.03 J
2,4-Dinitrotoluene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2,6-Dinitrotoluene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2-Chloronaphthalene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2-Chlorophenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2-Methylnaphthalene	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2-Methylphenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406
2-Nitrotoluene	1.67	<1.96		<2.16	<2.06	<2.03	<2.03
2-Nitrophenol	0.333	<0.393		<0.431	<0.413	<0.413	<0.406

TABLE C-2

DATA SUMMARY TABLE

Grooved Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)		Sample ID :	OT3905SA	OT3906SA	OT3907SA	OT3908SA
		Sample Date :	23-OCT-95	23-OCT-95	23-OCT-95	24-OCT-95
		Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
		Notes :				
Quantities	Limits					
3,3'-Dichlorobenzidine	0.667	<0.786	<0.863	<0.826 J	<0.812 J	
3-Nitroaniline	1.67	<1.96	<2.16	<2.06	<2.03	
4,6-Dinitro-2-methylphenol	1.67	<1.96	<2.16	<2.06 J	<2.03	
4-Bromophenyl phenyl ether	0.333	<0.393	<0.431	<0.413	<0.406	
4-Chloro-3-methylphenol	0.333	<0.393	<0.431	<0.413	<0.406	
4-Chloroaniline	0.667	<0.786 J	<0.863 J	<0.826	<0.812	
4-Chlorophenyl phenyl ether	0.333	<0.393	<0.431	<0.413	<0.406	
4-Methylphenol	0.333	<0.393	<0.431	<0.413	<0.406	
4-Nitroaniline	1.67	<1.96	<2.16	<2.06	<2.03	
4-Nitrophenol	1.67	<1.96	<2.16	<2.06	<2.03	
Acenaphthene	0.333	0.164 JQ	<0.431	0.0259 JQ	<0.406	
Acenaphthylene	0.333	<0.393	<0.431	<0.413	<0.406	
Anthracene	0.333	0.572	<0.431	0.0834 JQ	<0.406	
Benz(a)anthracene	0.333	3.98	<0.431	0.516	<0.406	
Benzo(a)pyrene	0.333	4.58	<0.431	0.667	<0.406	
Benzo(b)fluoranthene	0.333	6.11	<0.431	0.668	<0.406	
Benzo(g,h,i)perylene	0.333	3.48	<0.431	0.414	<0.406	
Benzo(k)fluoranthene	0.333	2.11	<0.431	0.513	<0.406	
Benzoic acid	1.67	<1.96	<2.16	<2.06	<2.03	
Benzyl alcohol	0.667	<0.786	<0.863	<0.826	<0.812	
Butyl benzyl phthalate	0.333	<0.393	<0.431	<0.413	<0.406	
Chrysene	0.333	3.51	<0.431	0.666	<0.406	
Di-n-butylphthalate	0.333	0.0688 JQ	<0.431	<0.413	<0.406	
Di-n-octylphthalate	0.333	<0.393	<0.431	<0.413	<0.406	
Dibenz(a,h)anthracene	0.333	0.931	<0.431	0.0541 JQ	<0.406	
Dibenzofuran	0.333	<0.393	<0.431	<0.413	<0.406	
Diethylphthalate	0.333	<0.393	<0.431	<0.413	<0.406	
Dimethylphthalate	0.333	<0.393	<0.431	<0.413	<0.406	
Fluoranthene	0.333	<0.393	<0.431	<0.413	<0.406	
Fluorene	0.333	4.83	<0.431	0.772	<0.406	
Hexachlorobenzene	0.333	0.117 JQ	<0.431	<0.413	<0.406	
Hexachlorobutadiene	0.333	<0.393	<0.431	<0.413	<0.406	
Hexachlorocyclopentadiene	0.333	<0.393	<0.431	<0.413	<0.406	
Hexachloroethane	0.333	<0.393	<0.431	<0.413 J	<0.406	
Indeno(1,2,3-cd)pyrene	0.333	<0.393	<0.431	<0.413	<0.406	
Isophorone	0.333	3.01	<0.431	0.362 JQ	<0.406	
Naphthalene	0.333	<0.393	<0.431	<0.413	<0.406	
Nitrobenzene	0.333	<0.393	<0.431	<0.413	<0.406	
Pentachlorophenol	0.333	<0.393	<0.431	<0.413	<0.406	
Phenanthrene	1.00	<1.18	<1.29	<1.24	<1.22	
Phenol	0.333	2.26	<0.431	0.276 JQ	<0.406	
Pyrene	0.333	<0.393	<0.431	<0.413	<0.406	
		6.29	<0.431	0.801	<0.406	

SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW-8270-SW-1350 (modified conf.)

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Jett Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID :			
		Sample Date :	Depth :	Notes :	
		OT3905SA	OT3906SA	OT3907SA	OT3908SA
		23-OCT-95	23-OCT-95	23-OCT-95	24-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW1350 (mL/hr) cont'd					
bis(2-Chloroethyl)methane	0.333	<0.393	<0.431	<0.413	<0.406
bis(2-Chloroethyl)ether	0.333	<0.393	<0.431	<0.413	<0.406
bis(2-Chloroisopropyl)ether	0.333	<0.393	<0.431	<0.413	<0.406
bis(2-Ethylhexyl)phthalate	0.333	2.35	<0.431	<0.413	<0.406
n-Nitrodi-n-propylamine	0.333	<0.393	<0.431	<0.413	<0.406
n-Nitrosodiphenylamine	0.333	<0.393	<0.431	<0.413	<0.406
% Spiked Recovery (Control Limit)					
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	88.1	56.0	57.0	66.0
sur-2-Fluorobiphenyl R% (30 - 115)	-	64.9	63.1	74.1	81.0
sur-2-Fluorophenol R% (25 - 121)	-	50.1	40.0	63.0	61.1
sur-Nitrobenzene-d5 R% (23 - 120)	-	49.1	42.9	55.9	65.0
sur-Phenol-d6 R% (24 - 113)	-	50.1	43.0	52.0	56.0
sur-Terphenyl-d14 R% (18 - 137)	-	93.9	57.1	85.0	73.9

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use

TABLE C-2

DATA SUMMARY TABLE

Grossed Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3909SA 24-OCT-95 0.0' - 2.0'	OT3910SA 23-OCT-95 0.0' - 2.0'	OT3911SA 23-OCT-95 0.0' - 2.0'	FDUP-06 23-OCT-95 0.0' - 2.0'
Duplicate of OT3911SA						
SOIL pH - SW9045/NONE (none)						
623-9045 pH units Soil	-		7.67	7.77	7.66	7.69
PERCENT SOLID - D2216 /NONE (percent)						
623-D2216 Moisture	-		17.0	16.0	21.0	18.0
METALS TOTAL BY ICP/SW6010/SW1959 (mg/kg)						
Aluminum	50.0		5260	3880	7000	6890
Antimony	25.0		2.25 JQ	<22.4	<24.0	<22.6
Barium	2.00		150	166	183	177
Beryllium	0.300		<2.60	<2.68	<2.88 J	1.81 JQ
Cadmium	1.00		<0.867	<0.895	<0.959	<0.903
Calcium	10.0		220000	281000	177000	176000
Chromium	5.00		21.7 JQ	<44.8	19.2 JQ	<45.2 J
Cobalt	5.00		2.17 JQ	2.42 JQ	3.16 JQ	2.89 JQ
Copper	5.00		4.34 JQ	4.48 JQ	9.59 JQ	9.03 JQ
Iron	5.00		5470	4580	6830	6710
Magnesium	25.0		1860	2080	2260	2200
Manganese	1.00		379	447	493	477
Molybdenum	5.00		<4.34	1.52 JQ	2.30 JQ	2.17 JQ
Nickel	5.00		231	238	257	241
Potassium	60.0		995	792	1930	1880
Silver	5.00		<4.34	<4.48	<4.80	<4.52
Sodium	25.0		109 JB	454	400	403
Thallium	25.0		<21.7	<22.4	<24.0	<22.6
Vanadium	5.00		8.41	7.70	9.11	9.12
Zinc	1.00		93.0	76.0	112	122
ARSENIC TOTAL BY GFAA/SW 7650 (mg/kg)						
Arsenic	0.500		2.11	1.87	2.05	1.82
LEAD TOTAL BY GFAA/SW 7421 (mg/kg)						
Lead	0.500		25.6	6.59	20.2	17.5
MERCURY TOTAL BY CVAASW 7471 (mg/kg)						
Mercury	0.185		<0.279	<0.275	<0.289	<0.288
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/kg)						
Selenium	0.500		0.562 JQ	0.488 JQ	<0.469	<0.462
ORGANOCHLORINE PESTICIDES AND PCBs - SW9800/SW1559 (mg/kg)						
4,4'-DDD	0.00333		<0.00397	<0.00405	<0.00413	0.00167 JQ
4,4'-DDE	0.00133		0.00792	<0.0162	<0.0165	<0.00161
4,4'-DDT	0.00333		<0.00397	<0.00405	<0.00413	<0.00403
ARI016	0.0333		<0.0397	<0.0405	<0.0413	<0.0403
ARI221	0.0333		<0.0397	<0.0405	<0.0413	<0.0403
ARI232	0.0333		<0.0397	<0.0405	<0.0413	<0.0403
ARI242	0.0333		<0.0397	<0.0405	<0.0413	<0.0403
ARI248	0.0333		<0.0397	<0.0405	<0.0413	<0.0403
ARI254	0.0333		0.161	<0.0405	<0.0413	<0.0403

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID			Duplicate of OT3911SA
		Sample Date	Sample ID	Sample Date	
		Depth	OT3910SA	OT3911SA	
		Notes	23-OCT-95	23-OCT-95	
			0.0' - 2.0'	0.0' - 2.0'	
ORGANOCHLORINE PESTICIDES AND PCBs - SW8009/SW1559 (mg/kg) cont'd					
ARI260	0.0333				
Aldrin	0.00133				
Chlordane	0.0166				
Dieldrin	0.000666				
Endosulfan I	0.00166				
Endosulfan II	0.00133				
Endosulfan sulfate	0.00333				
Endrin	0.00200				
Endrin aldehyde	0.00333				
Heptachlor	0.000999				
Heptachlor epoxide	0.00166				
Methoxychlor	0.0166				
Toxaphene	0.0666				
alpha-BHC	0.000999				
beta-BHC	0.00166				
delta-BHC	0.00166				
gamma-BHC (Lindane)	0.00133				
% Sulfonate Reservoir (Control Limit)					
aa-Dibutylchlorodisulfate R% (10 - 181)					
aa-TCMX R% (18 - 145)					
CHLORINATED HERBICIDES - SW8159/METHOD (mg/kg)					
2,4,5-T	0.00400				
2,4,5-TP (Silvex)	0.00400				
2,4-D	0.0400				
2,4-DB	0.0600				
Delepon	0.140				
Dicamba	0.00400				
Dichloroprop	0.0400				
Dimoseb	0.0140				
MCPA	3.00				
MCTP	3.00				
% Sulfonate Reservoir (Control Limit)					
aa-DCAA R% (0 - 191)					
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)					
1,1,1-Trichloroethane	0.00500				
1,1,2,2-Tetrachloroethane	0.00500				
1,1,2-Trichloroethane	0.00500				
1,1-Dichloroethane	0.00500				
1,1-Dichloroethene	0.00500				
1,2-Dichloroethane	0.00500				
1,2-Dichloropropene	0.00500				
2-Butanone (MEK)	0.0100				
2-Chloroethyl vinyl ether	0.0100				
2-Hexanone	0.0100				
4-Methyl-2-pentanone	0.0100				

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD/UNIT(S)	Quantitation Limits	Sample ID :		OT3910SA 24-OCT-95 0.0' - 2.0'	OT3910SA 23-OCT-95 0.0' - 2.0'	OT3911SA 23-OCT-95 0.0' - 2.0'	FDUP-06 23-OCT-95 0.0' - 2.0'
		Sample Date :	Depth :				
			Notes :				Duplicate of OT3911SA
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8246/NONE (mg/kg soil)							
Acetone	0.0100	<0.0123		<0.0120	<0.0123	<0.0122	
Benzene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Bromodichloromethane	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Bromoform	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Bromomethane	0.0100	<0.0123		<0.0120	<0.0123	<0.0122	
Carbon disulfide	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Carbon tetrachloride	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Chlorobenzene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Chloroethane	0.0100	<0.0123		<0.0120	<0.0123	<0.0122	
Chloroform	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Chloromethane	0.0100	<0.0123		<0.0120	<0.0123	<0.0122	
Dibromodichloromethane	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Ethylbenzene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Methylene chloride	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Styrene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Tetrahydrofuran	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Toluene	0.00500	0.00546	Q	0.00570	0.0112	0.00631	
Trichloroethene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
Vinyl acetate	0.0100	<0.0123	J	<0.0120	<0.0123	<0.0122	
Vinyl chloride	0.0100	<0.0123		<0.0120	<0.0123	<0.0122	
Xylenes (total)	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
cis-1,2-Dichloroethene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
trans-1,2-Dichloroethene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
trans-1,3-Dichloropropene	0.00500	<0.00617		<0.00602	<0.00614	<0.00610	
% Surrogate Recovery (Control Limit)							
sur-1,2-Dichloroethane-d4	-	110.0		104.0	108.0	104.1	
sur-Bromofluorobenzene	-	90.0		82.1	89.9	86.0	
sur-Toluene-d8	-	98.1		95.0	94.0	96.1	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg)							
1,2,4-Trichlorobenzene	0.333	<0.397		<0.392	<0.419	<0.406	
1,2-Dichlorobenzene	0.333	<0.397		<0.392	<0.419	<0.406	
1,3-Dichlorobenzene	0.333	<0.397		<0.392	<0.419	<0.406	
1,4-Dichlorobenzene	0.333	<0.397		<0.392	<0.419	<0.406	
2,4,5-Trichlorophenol	0.667	<0.794		<0.783	<0.839	<0.812	
2,4,6-Trichlorophenol	0.333	<0.397		<0.392	<0.419	<0.406	
2,4-Dichlorophenol	0.333	<0.397		<0.392	<0.419	<0.406	
2,4-Dimethylphenol	0.333	<0.397		<0.392	<0.419	<0.406	
2,4-Dinitrophenol	1.67	<1.98	J	<1.96	<2.10	<2.03	
2,4-Dinitrotoluene	0.333	<0.397		<0.392	<0.419	<0.406	
2,6-Dinitrotoluene	0.333	<0.397		<0.392	<0.419	<0.406	
2-Chloronaphthalene	0.333	<0.397		<0.392	<0.419	<0.406	
2-Chlorophenol	0.333	<0.397		<0.392	<0.419	<0.406	
2-Methylnaphthalene	0.333	<0.397		<0.392	<0.419	<0.406	
2-Methylphenol	0.333	<0.397		<0.392	<0.419	<0.406	
2-Nitrotoluene	1.67	<1.98		<1.96	<2.10	<2.03	
2-Nitrophenol	0.333	<0.397		<0.392	<0.419	<0.406	

TABLE C-1

DATA SUMMARY TABLE

Graves Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :			OT39108A 23-OCT-95 0.0' - 2.0'	OT39115A 23-OCT-95 0.0' - 2.0'	FDUP-06 23-OCT-95 0.0' - 2.0'
		Sample Date :	Depth :	Notes :			
		SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (ml/hr) cont'd					
3,3'-Dichlorobenzidine	0.667	<0.794 J			<0.783	<0.839	<0.812
3-Nitroaniline	1.67	<1.98			<1.96	<2.10	<2.03
4,6-Dinitro-2-methylphenol	1.67	<1.98			<1.96	<2.10	<2.03
4-Bromophenyl phenyl ether	0.333	<0.397			<0.392	<0.419	<0.406
4-Chloro-3-methylphenol	0.333	<0.397			<0.392	<0.419	<0.406
4-Chloroaniline	0.667	<0.794			<0.783 J	<0.839 J	<0.812 J
4-Chlorophenyl phenyl ether	0.333	<0.397			<0.392	<0.419	<0.406
4-Methylphenol	0.333	<0.397			<0.392	<0.419	<0.406
4-Nitroaniline	1.67	<1.98			<1.96	<2.10	<2.03
4-Nitrophenol	1.67	<1.98			<1.96	<2.10	<2.03
Acenaphthene	0.333	<0.397			<0.392	<0.419	0.0343 IQ
Acenaphthylene	0.333	<0.397			<0.392	<0.419	<0.406
Anthracene	0.333	<0.397			<0.392	<0.419	<0.406
Benzo(a)anthracene	0.333	0.244 IQ			<0.392	<0.419	<0.406
Benzo(a)pyrene	0.333	0.242 IQ			<0.392	<0.419	<0.406
Benzo(b)fluoranthene	0.333	0.488			<0.392	<0.419	<0.406
Benzo(g,h,i)perylene	0.333	0.142 IQ			<0.392	<0.419	<0.406
Benzo(k)fluoranthene	0.333	<0.397			<0.392	<0.419	<0.406
Benzoic acid	1.67	<1.98			<1.96	<2.10	<2.03
Benzyl alcohol	0.667	<0.794			<0.783	<0.839	<0.812
Butyl benzyl phthalate	0.333	<0.397			<0.392	<0.419	<0.406
Chrysene	0.333	0.344 IQ			<0.392	<0.419	<0.406
Di-n-butylphthalate	0.333	<0.397			<0.392	<0.419	<0.406
Di-n-octylphthalate	0.333	<0.397			<0.392	<0.419	<0.406
Dibenz(a,h)anthracene	0.333	0.0381 IQ			<0.392	<0.419	<0.406
Dibenzofuran	0.333	<0.397			<0.392	<0.419	<0.406
Diethylphthalate	0.333	<0.397			<0.392	<0.419	<0.406
Dimethylphthalate	0.333	<0.397			<0.392	<0.419	<0.406
Fluoranthene	0.333	0.243 IQ			<0.392	<0.419	0.0430 IQ
Fluorene	0.333	<0.397			<0.392	<0.419	0.0723 IQ
Hexachlorobenzene	0.333	<0.397			<0.392	<0.419	<0.406
Hexachlorobutadiene	0.333	<0.397			<0.392	<0.419	<0.406
Hexachlorocyclopentadiene	0.333	<0.397			<0.392	<0.419	<0.406
Hexachloroethane	0.333	<0.397			<0.392	<0.419	<0.406
Indeno(1,2,3-cd)pyrene	0.333	0.113 IQ			<0.392	<0.419	<0.406
Isophorone	0.333	<0.397			<0.392	<0.419	<0.406
Naphthalene	0.333	0.0153 IQ			<0.392	<0.419	0.0238 IQ
Nitrobenzene	0.333	<0.397			<0.392	<0.419	<0.406
Pentachlorophenol	1.00	<1.19			<1.18	<1.26	<1.22
Phenanthrene	0.333	0.0405 IQ			<0.392	<0.419	0.259 IQ
Phenol	0.333	<0.397			<0.392	<0.419	<0.406
Pyrene	0.333	0.293 IQ			<0.392	<0.419	0.0731 IQ

TABLE C-2

DATA SUMMARY TABLE
Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID :		OT3909SA 24-OCT-95 0.0' - 2.0'	OT3910SA 23-OCT-95 0.0' - 2.0'	OT3911SA 23-OCT-95 0.0' - 2.0'	FDUP-06 23-OCT-95 0.0' - 2.0'
		Sample Date :	Depth :				
		Notes :					
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SWEL76SW1550 (modified) cont'd.							
bis(2-Chloroethoxy)methane	0.333			<0.397	<0.392	<0.419	<0.406
bis(2-Chloroethyl)ether	0.333			<0.397	<0.392	<0.419	<0.406
bis(2-Chloroisopropyl)ether	0.333			<0.397	<0.397 JL	<0.419 JL	<0.406 JL
bis(2-Ethylhexyl)phthalate	0.333			<0.397	<0.392	<0.419	<0.406
n-Nitrosodi-n-propylamine	0.333			<0.397	<0.392	<0.419	<0.406
n-Nitrosodiphenylamine	0.333			<0.397	<0.392	<0.419	<0.406
% Surrogate Recovery (Control Limit)							
sur-2,4,6-Trinitrophenol R% (19 - 122)	-			68.1	67.0	80.0	72.1
sur-2-Fluorobiphenyl R% (30 - 115)	-			68.0	65.8	50.1	70.0
sur-2-Fluorophenol R% (25 - 121)	-			53.9	53.9	59.0	57.0
sur-Nitrobenzene-d5 R% (23 - 120)	-			58.9	64.0	63.0	65.0
sur-Phenol-d6 R% (24 - 113)	-			52.9	57.0	63.0	60.1
sur-Terphenyl-d14 R% (18 - 137)	-			83.9	75.0	72.1	65.0

Data Qualification Flags/Notes:

- J - Estimated quantitation based upon QC data
 JB - Estimated quantitation: possibly biased high or a false positive based upon blank data
 JH - Estimated quantitation: possibly biased high based upon QC data
 JL - Estimated quantitation: possibly biased low or a false negative based upon QC data
 JQ - Estimated quantitation: detected below the Practical Quantitation Limit
 R - Data rejected based upon QC data; do not use.

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID:			
		Sample Date:	Sample ID:	Sample Date:	Sample ID:
		Depth:	OT3913SA	OT3913SA	OT3913SA
		Notes:	24-OCT-95	24-OCT-95	24-OCT-95
			0.0 - 2.0	0.0 - 2.0	0.0 - 2.0
SOIL pH - SW9945/NONE (none)					
623-9045 pH units Soil	-	7.31	7.70	7.65	7.70
PERCENT SOLID - D2116 /NONE (percent)					
623-D2216 Moisture	-	19.0	18.0	19.0	17.0
METALS, TOTAL BY ICP/SW6010SW3950 (mg/kg)					
Aluminum	50.0	4620	5790	6280	5950
Arsenic	25.0	<20.7	<22.1 JL	2.97 JQ	<22.3
Barium	2.00	172	182	167	161
Beryllium	0.300	<2.49	<2.65	<2.78	<2.68
Cadmium	1.00	<0.829	<0.884 JL	<0.928	<0.892
Calcium	10.0	219000	232000	196000	197000
Chromium	5.00	9.95 JQ	<44.2	<46.4	8.03 JQ
Cobalt	5.00	2.57 JQ	2.03 JQ	2.51 JQ	1.78 JQ
Copper	5.00	7.46 JQ	8.84 JQ	12.1 JQ	8.03 JQ
Iron	5.00	4090	4390	5300	5160
Magnesium	25.0	1930	2100	2000	1830
Manganese	1.00	418	406	332	302
Molybdenum	5.00	<4.14	1.86 JL	<4.64	<4.46
Nickel	5.00	222	236	249	240
Potassium	60.0	977	1120	1390	991
Silver	5.00	<4.14	<4.42	<4.64	<4.46
Sodium	25.0	162 JB	342	146 JB	134 JB
Thallium	25.0	<20.7	<22.1	<23.2	<22.3
Vanadium	5.00	6.38	5.83	6.96	6.78
Zinc	1.00	73.6	75.1	81.1	75.4
ARSENIC, TOTAL BY GFAS/SW 7050 (mg/kg)					
Arsenic	0.500	<0.460	0.926	0.989	0.760 JH
LEAD, TOTAL BY GFAS/SW 7421 (mg/kg)					
Lead	0.500	10.1	6.66	8.48	9.19
MERCURY, TOTAL BY CYAAS/SW 7471 (mg/kg)					
Mercury	0.185	<0.302	<0.288	<0.271	<0.278
SELENIUM, TOTAL BY GFAS/SW 7740/METHOD (mg/kg)					
Selenium	0.500	0.599 JQ	<0.452 JL	0.617 JL	0.422 JQ
ORGANOCHLORINE PESTICIDES AND PCBs - SW8080/SW3550 (mg/kg)					
4,4'-DDD	0.00333	<0.00407	<0.00427	<0.00408	<0.00402
4,4'-DDE	0.00133	0.00128 JQ	<0.00171	0.000749 JQ	0.00104 JQ
4,4'-DDT	0.00333	<0.00407	<0.00427	<0.00408	<0.00402
ARI016	0.0333	<0.0407	<0.0427	<0.0408	<0.0402
ARI221	0.0333	<0.0407	<0.0427	<0.0408	<0.0402
ARI232	0.0333	<0.0407	<0.0427	<0.0408	<0.0402
ARI242	0.0333	<0.0407	<0.0427	<0.0408	<0.0402
ARI248	0.0333	<0.0407	<0.0427	<0.0408	<0.0402
ARI254	0.0333	<0.0407	<0.0427	<0.0408	<0.0402

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)												
ORGANOCHLORINE PESTICIDES AND PCBs - SW7000/SW3550 (mg/kg) cont'd												
Quantitation Limits	Sample ID	Sample Date	Depth	Notes	OT3912SA	OT3913SA	OT3914SA	OT3915SA				
		24-OCT-95	0.0' - 2.0'		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'				

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS									
Quantities Limits	Sample ID		Sample Date	Depth	Notes	OT3912SA 24-OCT-95 0.0' - 2.0'	OT3913SA 23-OCT-95 0.0' - 2.0'	OT3914SA 24-OCT-95 0.0' - 2.0'	OT3915SA 24-OCT-95 0.0' - 2.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg) cont'd.									
Acetone	0.0100					0.0403	<0.0124 J	<0.0123	<0.0120
Benzene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Bromodichloromethane	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Bromoforn	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Bromomethane	0.0100					<0.0121	<0.0124	<0.0123	<0.0120
Carbon disulfide	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Carbon tetrachloride	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Chlorobenzene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Chloroethane	0.0100					<0.0121	<0.0124 J	<0.0123	<0.0120
Chloroform	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Chloromethane	0.0100					<0.0121	<0.0124	<0.0123	<0.0120
Dibromochloromethane	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Ethylbenzene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Methylene chloride	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Styrene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Tetrachloroethane	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Toluene	0.00500					0.00244 IQ	0.0125 IQ	0.00376 IQ	0.00304 IQ
Trichloroethane	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
Vinyl acetate	0.0100					<0.0121 J	<0.0124	<0.0123 J	<0.0120 J
Vinyl chloride	0.0100					<0.0121	<0.0124	<0.0123	<0.0120
Xylenes (total)	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
cis-1,2-Dichloroethene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
cis-1,3-Dichloropropene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
trans-1,2-Dichloroethene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
trans-1,3-Dichloropropene	0.00500					<0.00604	<0.00621	<0.00616	<0.00601
% Surrogate Recovery (Control Limit)									
sur-1,2-Dichloroethane-d4	-	109.9	104.0	113.0		112.0			
sur-Bromofluorobenzene	-	88.9	82.0	92.9		88.0			
sur-Toluene-d8	-	101.0	95.0	100.0		101.0			
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW1350 (mg/kg)									
1,2,4-Trichlorobenzene	0.333	<20.4	<0.402	<0.407		<0.395			
1,2-Dichlorobenzene	0.333	<20.4	<0.402	<0.407		<0.395			
1,3-Dichlorobenzene	0.333	<20.4	<0.402	<0.407		<0.395			
1,4-Dichlorobenzene	0.333	<20.4	<0.402	<0.407		<0.395			
2,4,5-Trichlorophenol	0.667	<40.8	<0.804	<0.814		<0.790			
2,4,6-Trichlorophenol	0.333	<20.4	<0.402	<0.407		<0.395			
2,4-Dichlorophenol	0.333	<20.4	<0.402	<0.407		<0.395			
2,4-Dimethylphenol	0.333	<20.4	<0.402	<0.407		<0.395			
2,4-Dinitrophenol	1.67	<102 J	<2.01 J	<2.04 J		<1.98 J			
2,4-Dinitrotoluene	0.333	<20.4	<0.402	<0.407		<0.395			
2,6-Dinitrotoluene	0.333	<20.4	<0.402	<0.407		<0.395			
2-Chloronaphthalene	0.333	<20.4	<0.402	<0.407		<0.395			
2-Chlorophenol	0.333	<20.4	<0.402	<0.407		<0.395			
2-Methylnaphthalene	0.333	12.2 IQ	<0.402	<0.407		<0.395			
2-Methylphenol	0.333	<20.4	<0.402	<0.407		<0.395			
2-Nitroaniline	1.67	<102	<2.01	<2.04		<1.98			
2-Nitrophenol	0.333	<20.4	<0.402	<0.407		<0.395			

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)						
Quantitation Limits	Sample ID :					
	Sample Date :					
	Depth :					
Notes :						
0.667	<40.8	<0.804	<0.814	<0.790 J		
1.67	<102	<2.01	<2.04	<1.98		
1.67	<102	<2.01 J	<2.04	<1.98		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.667	<40.8 J	<0.804 J	<0.814 J	<0.790		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
1.67	<102	<2.01	<2.04	<1.98		
1.67	<102	<2.01	<2.04	<1.98		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.667	<102	<2.01	<2.04	<1.98		
0.333	<40.8	<0.804	<0.814	<0.790		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407 J	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	2.53 IQ	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
1.00	<61.3	<1.21	<1.22	<1.19		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		
0.333	<20.4	<0.402	<0.407	<0.395		

Fort Worth, Texas

R = Datum rejected based upon QC data; do not use.

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TABLE C-2

DATA SUMMARY TABLE
Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limit	Sample ID : Sample Date : Depth : Notes :	OT3916SA 24-OCT-95 0.0' - 2.0'	OT3917SA 23-OCT-95 0.0' - 2.0'	OT3918SA 23-OCT-95 0.0' - 2.0'	OT3918SA 24-OCT-95 0.0' - 2.0'	OT3920SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none) 623-9045 pH units Soil	-		7.83	7.67	7.78	7.60	7.50
PERCENT SOLID - D2216 /NONE (percent) 623-D2216 Moisture	-		13.0	18.0	14.0	13.0	16.0
METALS, TOTAL BY ICP/SW6010/SW3059 (mg/kg)							
Aluminum	50.0		5890	7810	6730	3540	4530
Antimony	25.0		3.06 JQ	<2.9	<21.4	<19.6	<21.7 JL
Barium	2.00		120	125	130	141	112 JH
Beryllium	0.300		<2.48	0.458	0.428	<2.35	<2.61
Cadmium	1.00		<0.827	<0.917	<0.855	<0.782	<0.869 JL
Calcium	10.0		197000	111000	139000	234000	165000
Chromium	5.00		132 JQ	7.06	6.16	7.04 JQ	7.82 JH
Cobalt	5.00		2.48 JQ	3.94 JQ	2.48 JQ	1.09 JQ	2.69 JQ
Copper	5.00		9.92 JQ	9.35	8.21	21.9	3.48 JH
Iron	5.00		6240	7730	6570	4920	5240
Magnesium	25.0		2080	2160	2140	1670	1670
Manganese	1.00		321	313	313	310	328
Molybdenum	5.00		<4.14	2.02	2.31 JQ	1.25 JQ	1.25 JQ
Nickel	5.00		222	6.60	6.58	126	233
Potassium	60.0		1120	1840	1740	738	1170
Silver	5.00		<4.14	<4.58	<4.28	<3.91	<4.34
Sodium	25.0		107 JB	550	383	113 JB	121 JB
Thallium	25.0		<20.7	<22.9	<21.4	<19.6	<21.7
Vanadium	5.00		8.52	11.6	7.18	7.12	9.99
Zinc	1.00		93.0	25.3	26.6	52.7	95.2 J
ARSENIC, TOTAL BY GFAA/SW 7049 (mg/kg)							
Arsenic	0.500		1.49	1.40	2.13	1.33	1.39
LEAD, TOTAL BY GFAA/SW 7431 (mg/kg)							
Lead	0.500		20.3 JH	7.96	14.9	11.3	46.7
MERCURY, TOTAL BY CVAA/SW 7471 (mg/kg)							
Mercury	0.270		<0.257	<0.289	<0.272	<0.268	<0.262
SELENIUM, TOTAL BY GFAA/SW 7749/METHOD (mg/kg)							
Selenium	0.500		<0.396	<0.452	<0.430	0.125 JL	<0.410 JL
ORGANOCHLORINE PESTICIDES AND PCBs - SW9080/SW3559 (mg/kg)							
4,4'-DDD	0.00333		<0.00379	<0.00415	<0.00386	<0.00380	0.0124
4,4'-DDE	0.00133		0.0116	<0.00166	0.00165	<0.00152	0.0430
4,4'-DDT	0.00333		<0.00379	<0.00415	<0.00386	<0.00380	0.0134
AR1016	0.0333		<0.0379	<0.0415	<0.0386	<0.0380	<0.0394
AR1221	0.0333		<0.0379	<0.0415	<0.0386	<0.0380	<0.0394
AR1232	0.0333		<0.0379	<0.0415	<0.0386	<0.0380	<0.0394
AR1242	0.0333		<0.0379	<0.0415	<0.0386	<0.0380	<0.0394
AR1248	0.0333		<0.0379	<0.0415	<0.0386	<0.0380	<0.0394
AR1254	0.0333		0.1181	<0.0415	<0.0386	<0.0380	<0.0394

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID:			
		Sample Date:	OT3916SA	OT3917SA	OT3918SA
		Depth:	24-OCT-95	23-OCT-95	24-OCT-95
		Notes:	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
ORGANOCHLORINE PESTICIDES AND PCBS - SWP000/SW3559 (mg/kg) cont'd.					
ARI260	0.0333		<0.0379	<0.0415	<0.0386
Aldrin	0.00133		<0.00152	<0.00166	<0.00154
Chlordane	0.0166		<0.0190 R	<0.0208	<0.0193
Dieldrin	0.000666		<0.000758	<0.000830	<0.000772
Endosulfan I	0.00166		<0.00190	<0.00208	<0.00193
Endosulfan II	0.00133		<0.00152	<0.00166	<0.00154
Endosulfan sulfate	0.00333		<0.00379	<0.00415	<0.00386
Endrin	0.00200		<0.00227	<0.00249	<0.00232
Endrin aldehyde	0.00333		<0.00379	<0.00415	<0.00386
Heptachlor	0.000999		<0.00114	<0.00124	<0.00116
Heptachlor epoxide	0.00166		<0.00190	<0.00208	<0.00193
Methoxychlor	0.0166		<0.0190	<0.0208	<0.0193
Toxaphene	0.0666		<0.0758	<0.0830	<0.0772
alpha-BHC	0.000999		<0.00114	<0.00124	<0.00116
beta-BHC	0.00166		<0.00190	<0.00208	<0.00193
delta-BHC	0.00166		<0.00190	<0.00208	<0.00193
gamma-BHC (Lindane)	0.00133		<0.00152	<0.00166	<0.00154
% Saturated Reservoir (Control Limit)					
sur-Dibutylchloride R% (10 - 181)	-	16.0	7.0	4.0	59.0
sur-TOMX R% (18 - 145)	-	69.1	77.7	74.8	80.0
CHLORINATED HERBICIDES - SW8150/METHOD (mg/kg)					
2,4,5-T	0.00400		<0.00460	<0.00500	<0.00460
2,4,5-TP (Silvec)	0.00400		<0.00460	0.00510	<0.00460
2,4-D	0.0400		<0.0460	<0.0500	<0.0460
2,4-DB	0.0600		<0.0690	<0.0750	<0.0690
Delapox	0.140		<0.161	<0.175 J	<0.161
Dicamba	0.00400		<0.00460	<0.00500 JL	<0.00460
Dichloroprop	0.0400		<0.0460 J	<0.0500	<0.0460 J
Dinoseb	0.0140		<0.0161	<0.0175	<0.0161
MCPA	3.00		<3.45	<3.75	<3.45
MCPP	3.00		<3.45	<3.75	<3.45
% Saturated Reservoir (Control Limit)					
sur-DCAA R% (0 - 191)	-	39.9	56.8	48.3	38.0
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg)					
1,1,1-Trichloroethane	0.00500		<0.00630	<0.00607	<0.00603
1,1,2,2-Tetrachloroethane	0.00500		<0.00630	<0.00607	<0.00603
1,1,2-Trichloroethane	0.00500		<0.00630	<0.00607	<0.00603
1,1-Dichloroethane	0.00500		<0.00630	<0.00607	<0.00603
1,1-Dichloroethene	0.00500		<0.00630	<0.00607	<0.00603
1,2-Dichloroethane	0.00500		<0.00630	<0.00607	<0.00603
1,2-Dichloropropane	0.00500		<0.00630	<0.00607	<0.00603
2-Butanone (MEK)	0.0100		<0.0126	0.0266 J	<0.0121
2-Chloroethyl vinyl ether	0.0100		<0.0126	<0.0121	<0.0121
2-Hexanone	0.0100		<0.0126 J	<0.0121	<0.0121 J
4-Methyl-2-pentanone	0.0100		<0.0126	<0.0121	<0.0121

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth, Joliet Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	OT3916SA 24-OCT-95 0.0' - 2.0'	OT3917SA 23-OCT-95 0.0' - 2.0'	OT3918SA 23-OCT-95 0.0' - 2.0'	OT3919SA 24-OCT-95 0.0' - 2.0'	OT3920SA 24-OCT-95 0.0' - 2.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg conc'd)							
Acetone	0.0100		<0.0126	0.107 J	<0.0121 J	<0.0121	0.0771
Benzene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Bromodichloromethane	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Bromoform	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Bromomethane	0.0100		<0.0126	<0.0121	<0.0121	<0.0121	<0.0120
Carbon disulfide	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Carbon tetrachloride	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Chlorobenzene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Chloroethane	0.0100		<0.0126	<0.0121 J	<0.0121 J	<0.0121	<0.0120
Chloroform	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Chloromethane	0.0100		<0.0126	<0.0121	<0.0121	<0.0121	<0.0120
Dibromodichloromethane	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Ethylbenzene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Methylene chloride	0.00500		<0.00630	<0.00607	<0.00603	0.00289 JQ	<0.00600
Styrene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Tetrachloroethane	0.00500		<0.00630	<0.00607	0.000440 JQ	<0.00603	<0.00600
Toluene	0.00500		0.00382 JQ	0.00362 JQ	0.00469 JQ	0.00136 JQ	0.00344 JQ
Trichloroethane	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
Vinyl acetate	0.0100		<0.0126 J	<0.0121	<0.0121	<0.0121 J	<0.0120 J
Vinyl chloride	0.0100		<0.0126	<0.0121	<0.0121	<0.0121	<0.0120
Xylenes (total)	0.00500		<0.00630	0.00296 JQ	<0.00603	<0.00603	<0.00600
cis-1,2-Dichloroethane	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
trans-1,3-Dichloropropene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
trans-1,2-Dichloroethane	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
trans-1,3-Dichloropropene	0.00500		<0.00630	<0.00607	<0.00603	<0.00603	<0.00600
% Sarcoside Recovery (Control Limit)							
m-x-1,2-Dichloroethane-d4 R% (70-121)	-		110.0	105.9	103.0	110.0	112.0
m-x-Bromodichloroethane R% (74-121)	-		90.0	84.0	90.0	87.9	92.0
m-x-Toluene-d8 R% (81-117)	-		97.0	94.1	97.0	99.0	97.0
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW2550 (mg/kg)							
1,2,4-Trichlorobenzene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
1,2-Dichlorobenzene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
1,3-Dichlorobenzene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
1,4-Dichlorobenzene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2,4,5-Trichlorophenol	0.667		<0.766	<0.808	<0.763	<0.765	<0.790
2,4,6-Trichlorophenol	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2,4-Dichlorophenol	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2,4-Dimethylphenol	0.333		<0.383	<0.404	<0.382	<0.382 IL	<0.395
2,4-Dinitrophenol	1.67		<1.92 J	<2.02	<1.91	<1.91	<1.98 J
2,4-Dinitrotoluene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395 IL
2,6-Dinitrotoluene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2-Chloronaphthalene	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2-Chlorophenol	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2-Methylmethylthiophene	0.333		<0.383	<0.404	<0.382	<0.382	0.139 JQ
2-Methylphenol	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
2-Nitroaniline	1.67		<1.92	<2.02	<1.91	<1.91	<1.98
2-Nitrophenol	0.333		<0.383	<0.404	<0.382	<0.382	<0.395

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)					
Quantitation	Sample ID :	OT3916SA	OT3917SA	OT3918SA	OT3919SA
Limit	Sample Date :	24-OCT-95	23-OCT-95	23-OCT-95	24-OCT-95
	Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
	Notes :				
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (method not)					
0.667	3,3'-Dichlorobenzidine	<0.766 J	<0.808	<0.763	<0.765 J
1.67	3-Nitroaniline	<1.92	<2.02	<1.91	<1.98
1.67	4,6-Dinitro-2-methylphenol	<1.92	<2.02	<1.91	<1.98
0.333	4-Bromophenyl phenyl ether	<0.383	<0.404	<0.382	<0.395
0.333	4-Chloro-3-methylphenol	<0.383	<0.404	<0.382	<0.395
0.667	4-Chloroaniline	<0.766	<0.808 J	<0.763	<0.790 J
0.333	4-Chlorophenyl phenyl ether	<0.383	<0.404	<0.382	<0.395
0.333	4-Methylphenol	<0.383	<0.404	<0.382	<0.395
1.67	4-Nitroaniline	<1.92	<2.02	<1.91	<1.98
1.67	4-Nitrophenol	<1.92	<2.02	<1.91	<1.98
0.333	Acenaphthene	<0.383	<0.404	<0.382	<0.395
0.333	Acenaphthylene	<0.383	<0.404	<0.382	<0.395
0.333	Anthracene	<0.383	<0.404	<0.382	<0.395
0.333	Benzo(b)fluoranthene	<0.383	<0.404	<0.382	<0.395 J
0.333	Benzo(a)pyrene	0.0274 JQ	<0.404	<0.382	0.0419 J
0.333	Benzo(b)fluoranthene	<0.383	<0.404	<0.382	0.0335 J
0.333	Benzo(g,h,i)perylene	0.0697 JQ	<0.404	<0.382	<0.395 J
0.333	Benzo(k)fluoranthene	<0.383	<0.404	<0.382	<0.395 J
1.67	Benzoic acid	<1.92	<2.02	<1.91	<1.98
0.667	Benzyl alcohol	<0.766	<0.808	<0.763	<0.790
0.333	Butyl benzyl phthalate	2.60	<0.404	<0.382	<0.395 J
0.333	Chrysene	0.0490 JQ	<0.404	<0.382	0.0389 J
0.333	Di-n-butylphthalate	0.0282 JQ	<0.404	<0.382	<0.395
0.333	Di-n-octylphthalate	<0.383	<0.404	<0.382	<0.395 J
0.333	Dibenz(a,h)anthracene	<0.383	<0.404	<0.382	<0.395 J
0.333	Dibenzofuran	<0.383	<0.404	<0.382	<0.395
0.333	Diethylphthalate	<0.383	<0.404	<0.382	<0.395
0.333	Dimethylphthalate	6.13	<0.404	<0.382	<0.395
0.333	Fluoranthene	0.0598 JQ	<0.404	<0.382	<0.395
0.333	Fluorene	<0.383	<0.404	<0.382	0.0486 JQ
0.333	Hexachlorobenzene	<0.383	<0.404	<0.382	<0.395
0.333	Hexachlorobutadiene	<0.383	<0.404	<0.382	<0.395
0.333	Hexachlorocyclopentadiene	<0.383	<0.404	<0.382	<0.395
0.333	Hexachloroethane	<0.383	<0.404	<0.382	<0.395
0.333	Indeno(1,2,3-cd)pyrene	<0.383	<0.404	<0.382	<0.395 J
0.333	Isophorane	<0.383	<0.404	<0.382	<0.395
0.333	Naphthalene	<0.383	<0.404	<0.382	<0.395
0.333	Nitrobenzene	<0.383	<0.404	<0.382	<0.395
1.00	Pentachlorophenol	<1.15	<1.21	<1.14	<1.18 JL
0.333	Phenanthrene	<0.383	<0.404	<0.382	0.0774 JQ
0.333	Phenol	<0.383	<0.404	<0.382	<0.395

TABLE C-2

DATA SUMMARY TABLE

Grossed Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3916SA 24-OCT-95 0.0' - 2.0'	OT3917SA 23-OCT-95 0.0' - 2.0'	OT3918SA 23-OCT-95 0.0' - 2.0'	OT3919SA 24-OCT-95 0.0' - 2.0'	OT3920SA 24-OCT-95 0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3659 (mg/kg conc'd)							
Pyrene	0.333						
bis(2-Chloroethoxy)methane	0.333		0.0600 IQ	<0.404	<0.382	<0.382	0.0889 J
bis(2-Chloroethyl)ether	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
bis(2-Chloroisopropyl)ether	0.333		<0.383	<0.404 JL	<0.382	<0.382	<0.395
bis(2-Ethylhexyl)phthalate	0.333		0.0170 IQ	<0.404	0.494	<0.382	<0.395 J
n-Nitrosodi-n-propylamine	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
n-Nitrosodiphenylamine	0.333		<0.383	<0.404	<0.382	<0.382	<0.395
% Sulfonate Recover (Control Limit)							
sur-2,4,6-Trichlorophenol R% (19 - 122)	-		68.0	57.1	68.9	58.0	53.0
sur-2-Fluorobiphenyl R% (30 - 115)	-		67.9	80.9	69.9	73.0	60.0
sur-2-Fluorophenol R% (25 - 121)	-		52.0	62.0	55.0	51.9	43.1
sur-Nitrobenzene-d5 R% (23 - 120)	-		59.0	68.1	62.8	58.1	50.1
sur-Phenol-d6 R% (24 - 113)	-		52.0	62.0	60.9	54.9	44.1
sur-Terphenyl-d14 R% (18 - 137)	-		84.1	80.9	84.0	64.1	84.1

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data; do not use.

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(S)	Quantitation Limits	Sample ID :			
		Sample Date :	Depth :	Notes :	
		OT3921SA	OT3922SA	OT3923SA	OT3924SA
		24-OCT-95	24-OCT-95	24-OCT-95	24-OCT-95
		0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
SOIL pH - SW9945/NONE (none)					
623-9045 pH units Soil	-	7.52	7.54	7.56	7.61
PERCENT SOLID - D2216 /NONE (percent)					
623-D2216 Moisture	-	12.0	18.0	22.0	17.0
METALS TOTAL BY ICP/SW6910/SW3059 (mg/kg)					
Aluminum	50.0	4810	10800	9060	5530
Antimony	25.0	2.24 IQ	3.17 IQ	<23.9	2.68 IQ
Barium	2.00	82.9	133	133	100
Beryllium	0.300	<2.49	<2.44	<2.87	<2.51
Cadmium	1.00	<0.829	<0.813	<0.957	<0.837
Calcium	10.0	157000	119000	120000	193000
Chromium	5.00	<41.4	14.6 IQ	<47.8	13.4 IQ
Cobalt	5.00	1.74 IQ	2.60 IQ	1.24 IQ	1.59 IQ
Copper	5.00	8.29 IQ	10.6 IQ	16.3 IQ	21.8 IQ
Iron	5.00	5280	7920	8570	4620
Magnesium	25.0	1770	2630	2210	2480
Manganese	1.00	273	222	163	372
Molybdenum	5.00	1.41 IQ	<4.06	1.53 IQ	<4.18
Nickel	5.00	134	114	155	135
Potassium	5.00	984	1970	1860	1130
Silver	5.00	<4.14	<4.06	<4.78	<4.18
Sodium	25.0	92.4 JB	216 JB	81.8 JB	147 JB
Thallium	25.0	<20.7	<20.9	<20.9	<22.3
Vanadium	5.00	11.3	9.84	13.8	8.79
Zinc	1.00	71.2	48.9	58.8	105
ARSENIC TOTAL BY GFAS/SW 7660 (mg/kg)					
Arsenic	0.500	14.2	3.08	0.566	1.27
LEAD TOTAL BY GFAS/SW 7421 (mg/kg)					
Lead	0.500	14.6	9.11	33.1	14.0
MERCURY TOTAL BY CVAA/SW 7471 (mg/kg)					
Mercury	0.270	<0.251	<0.296	<0.302	<0.276
SELENIUM TOTAL BY GFAS/SW 7740/METHOD (mg/kg)					
Selenium	0.500	0.0895 JL	<0.430	<0.493 JL	0.104 JL
ORGANOCHLORINE PESTICIDES AND PCBs - SW8090/SW3559 (mg/kg)					
4,4'-DDD	0.00333	<0.00376	<0.00400	<0.00426	<0.00400
4,4'-DDE	0.00133	0.000653 IQ	<0.00160	<0.00170	<0.00159
4,4'-DDT	0.00333	<0.00376	<0.00400	<0.00426	<0.00397
ARI016	0.0333	<0.0376	<0.0400	<0.0426	<0.0397
ARI221	0.0333	<0.0376	<0.0400	<0.0426	<0.0397
ARI232	0.0333	<0.0376	<0.0400	<0.0426	<0.0397
ARI242	0.0333	<0.0376	<0.0400	<0.0426	<0.0397
ARI248	0.0333	<0.0376	<0.0400	<0.0426	<0.0397
ARI254	0.0333	<0.0376	<0.0400	<0.0426	<0.0397

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	OT3922SA 24-OCT-95 0.0' - 2.0'	OT3923SA 24-OCT-95 0.0' - 2.0'	OT3924SA 24-OCT-95 0.0' - 2.0'	OT3925SA 24-OCT-95 0.0' - 2.0'
ORGANOCHLORINE PESTICIDES AND PCBS - SW8240/STW3559 (method cont'd)						
ARI260	0.0333					
Aldrin	0.00133		<0.0376	<0.0426	<0.0400	<0.0397
Chlordane	0.0166		<0.00150	<0.00170	<0.00160	<0.00159
Dieldrin	0.000666		0.0584	<0.0213	<0.0200	<0.0198
Endosulfan I	0.00166		<0.00752	<0.00852	0.0104 IQ	<0.00794
Endosulfan II	0.00133		<0.00188	<0.00213	<0.00800	<0.00794
Endosulfan sulfate	0.00333		<0.00150	<0.00170	<0.00200	<0.00198
Endrin	0.00200		<0.00376	<0.00426	<0.00160	<0.00159
Endrin aldehyde	0.00333		<0.00226	<0.00256	<0.00400	<0.00397
Heptachlor	0.000999		<0.00376	<0.00426	<0.00240	<0.00238
Heptachlor epoxide	0.00166		<0.00113	<0.00128	<0.00400	<0.00397
Methoxychlor	0.0166		<0.00188	<0.00213	<0.00120	<0.00119
Toxaphene	0.0666		<0.0188	<0.0213	<0.00200	<0.00198
alpha-BHC	0.000999		<0.0752	<0.0852	<0.0200	<0.0198
beta-BHC	0.00166		<0.00113	<0.00128	<0.00080	<0.0794
delta-BHC	0.00166		<0.00188	<0.00213	<0.00120	<0.00119
gamma-BHC (Lindane)	0.00133		<0.00150	<0.00200	<0.00200	<0.00198
% Surrogate Recovery (Control Limit)						
sur-Dibutylchloride R% (10 - 181)	-	81.0	15.0	85.1	86.0	48.0
sur-TCMX R% (18 - 145)	-		81.3			
CHLORINATED HERBICIDES - SW8150/METHOD (mug/kg)						
2,4,5-T	0.00400		<0.00450	<0.00508	<0.00480	<0.00480
2,4,5-TP (Silvex)	0.00400		<0.00450	<0.00508	<0.00480	<0.00480
2,4-D	0.0400		<0.0450	<0.0508	<0.0480	<0.0480
2,4-DB	0.0600		<0.0675	<0.0732	<0.0720	<0.0720
Dalapon	0.140		<0.158	<0.178	<0.168	<0.168
Dicamba	0.00400		<0.00450	<0.00508	<0.00480	<0.00480
Dichloroprop	0.0400		<0.0450 J	<0.0508 J	<0.0480 J	<0.0480
Dinoseb	0.0140		<0.0158	<0.0178	<0.0168	<0.0168
MCPA	3.00		<3.38	<3.81	<3.60	<3.60
MCPP	3.00		<3.38	<3.81	<3.60	<3.60
% Surrogate Recovery (Control Limit)						
sur-DCAA R% (0 - 191)	-	39.0	39.0	42.1	40.0	42.1
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mug/kg)						
1,1,1-Trichloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,1,2,2-Tetrachloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,1,2-Trichloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,1-Dichloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,1-Dichloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,2-Dichloroethane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
1,2-Dichloropropane	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
2-Butanone (MEK)	0.00500		<0.00610	<0.00635	<0.00625	<0.00600
2-Chloroethyl vinyl ether	0.0100		<0.0122	<0.0127	<0.0125	<0.0120
2-Hexanone	0.0100		<0.0122 J	<0.0127 J	<0.0125 J	<0.0120 J
4-Methyl-2-pentanone	0.0100		<0.0122	<0.0127	<0.0125	<0.0120

TABLE C-3

DATA SUMMARY TABLE
 Ground Maintenance Yard
 Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD(UNITS)									
Quantitation Limits	Sample ID :		OT3921SA 24-OCT-95 0.0' - 2.0'	OT3922SA 24-OCT-95 0.0' - 2.0'	OT3923SA 24-OCT-95 0.0' - 2.0'	OT3924SA 24-OCT-95 0.0' - 2.0'	OT3925SA 24-OCT-95 0.0' - 2.0'		
	Sample Date :	Depth :							
	Notes :								
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg conc'd)									
Acetone	0.0100	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Benzene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Bromodichloromethane	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Bromoform	0.00500	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Bromomethane	0.0100	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Carbon disulfide	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Carbon tetrachloride	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Chlorobenzene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Chloroethane	0.0100	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Chloroform	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Chloromethane	0.0100	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Dibromodichloromethane	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Ethylbenzene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Methylene chloride	0.00500	0.0271	<0.00606	0.00312 IQ	0.00319 IQ	0.00312 IQ	0.00319 IQ	<0.00600	
Styrene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Tetrachloroethane	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Toluene	0.00500	<0.00610	0.00770	<0.00635	0.000692 IQ	<0.00635	0.000692 IQ	0.0336 IQ	
Trichloroethene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
Vinyl acetate	0.0100	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Vinyl chloride	0.0100	<0.0122	<0.0121	<0.0127	<0.0125	<0.0127	<0.0125	<0.0120	
Xylenes (total)	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
cis-1,2-Dichloroethane	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
cis-1,3-Dichloropropene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
trans-1,2-Dichloroethane	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
trans-1,3-Dichloropropene	0.00500	<0.00610	<0.00606	<0.00635	<0.00625	<0.00635	<0.00625	<0.00600	
% Sarcosine Recovery (Control Limit)									
sur-1,2-Dichloroethane-d4	-	113.1	110.9	113.1	113.0	113.0	113.0	110.0	
sur-Bromofluorobenzene	-	92.0	90.9	91.0	92.0	91.2	92.0	91.2	
sur-Toluene-d8	-	99.0	101.0	103.0	101.9	102.0	101.9	102.0	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg)									
1,2,4-Trichlorobenzene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
1,2-Dichlorobenzene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
1,3-Dichlorobenzene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
1,4-Dichlorobenzene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2,4,5-Trichlorophenol	0.667	<0.753	<0.801	<0.845	<0.800	<0.845	<0.800	<0.799	
2,4,6-Trichlorophenol	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2,4-Dichlorophenol	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2,4-Dimethylphenol	0.333	<0.377 IL	<0.400	<0.423 IL	<0.400 IL	<0.423 IL	<0.400 IL	<0.399	
2,4-Dinitrophenol	1.67	<1.88	<2.00	<2.11	<2.00	<2.11	<2.00	<2.00	
2,4-Dinitrotoluene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2,6-Dinitrotoluene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2-Chloronaphthalene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2-Chlorophenol	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2-Methylnaphthalene	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2-Methylphenol	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	
2-Nitroaniline	1.67	<1.88	<2.00	<2.11	<2.00	<2.11	<2.00	<2.00	
2-Nitrophenol	0.333	<0.377	<0.400	<0.423	<0.400	<0.423	<0.400	<0.399	

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Jettie Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD/UNITS					
Sample ID :	Sample Date :	Depth :	Notes :	Quantitation Limit	
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270SW3550 (mg/kg) conf'd					
3,3'-Dichlorobenzidine	OT3921SA	24-OCT-95	0.0' - 2.0'	<0.753	<0.801 J
3-Nitroaniline				<1.88	<2.00
4,6-Dinitro-2-methylphenol				<1.88	<2.11
4-Bromophenyl phenyl ether				<0.377	<0.400
4-Chloro-3-methylphenol				<0.377	<0.400
4-Chloroaniline				<0.753 J	<0.801
4-Chlorophenyl phenyl ether				<0.377	<0.400
4-Methylphenol				<0.377	<0.400
4-Nitroaniline				<0.377	<0.400
4-Nitrophenol				<1.88	<2.11
Acenaphthene				<1.88	<2.11
Acenaphthylene				<0.377	<0.400
Anthracene				<0.377	<0.400
Benz(a)anthracene				<0.377 J	<0.400
Benzofluoranthene				<0.377 J	<0.400
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Benzofluoranthene				<0.377 J	<0.400
Benzofluoranthene					

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)								
Quantitation Limits	Sample ID :		Notes :	OT3921SA 24-OCT-95 0.0' - 2.0'	OT3922SA 24-OCT-95 0.0' - 2.0'	OT3923SA 24-OCT-95 0.0' - 2.0'	OT3924SA 24-OCT-95 0.0' - 2.0'	OT3925SA 24-OCT-95 0.0' - 2.0'
	Sample Date :	Depth :						
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW8250 (mg/kg) conc'd.								
Pyrene	0.333			0.0708 J	<0.400	<0.423	<0.400	<0.399 J
bis(2-Chloroethoxy)methane	0.333			<0.377	<0.400	<0.423	<0.400	<0.399
bis(2-Chloroethyl)ether	0.333			<0.377	<0.400	<0.423	<0.400	<0.399
bis(2-Chloroisopropyl)ether	0.333			<0.377 J	<0.400	<0.423	<0.400	<0.399
bis(2-Ethylhexyl)phthalate	0.333			<0.377	<0.400	<0.423	<0.400	<0.399 J
n-Nitrosodi-n-propylamine	0.333			<0.377	<0.400	<0.423	<0.400	<0.399
n-Nitrosodiphenylamine	0.333			<0.377	<0.400	<0.423	<0.400	<0.399
% Surrogate Recovery (Control Limit)								
sur-2,4,6-Trichlorophenol	-	41.9			61.0	56.9	61.0	51.1
sur-2-Fluorobiphenyl	-	53.8			77.0	80.9	73.0	60.2
sur-2-Fluorophenol	-	34.0			59.0	53.0	50.0	44.1
sur-Nitrobenzene-d5	-	35.0			65.0	61.0	53.0	47.1
sur-Phenol-d6	-	35.0			56.0	64.0	58.0	40.1
sur-Terphenyl-d14	-	67.9			85.0	70.0	80.0	76.2

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data: do not use

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	FDUP08 24-OCT-95 0.0' - 2.0' Duplicate of OT3925SA	OT3926SA 24-OCT-95 0.0' - 2.0'	OT3927SA 24-OCT-95 0.0' - 2.0'	OT3928SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9045/NONE (none)						
623-9045 pH units Soil			7.82	7.65	7.54	7.24
PERCENT SOLID - D2216/NONE (percent)						
623-D2216 Moisture			19.0	18.0	19.0	17.0
METALS TOTAL BY CP/SW 6010/SW3650 (mg/kg)						
Aluminum	50.0		7680	6970	7910	7700
Antimony	25.0		<21.7	2.71 JQ	<21.2	<20.5
Barium	2.00		126	128	135	119
Beryllium	0.300		0.521	<2.71	0.592	<2.46
Cadmium	1.00		<0.869	<0.903	<0.846	<0.820
Calcium	10.0		128000	121000 J	71500 J	113000
Chromium	5.00		9.21	<45.2	7.19	26.2 JQ
Cobalt	5.00		2.43 JQ	2.71 JQ	3.47 JQ	3.03 JQ
Copper	5.00		9.04	9.93 JQ	13.0	10.7 JQ
Iron	5.00		6850	5930	6790	9630 J
Magnesium	25.0		2110	2020	2260	2310
Manganese	1.00		190	275	279	381
Molybdenum	5.00		<4.34	<4.52	<4.23	1.72 JQ
Nickel	5.00		6.78	65.8	7.61	116 J
Potassium	60.0		1540	1580	2010	2060
Silver	5.00		<4.34	<4.52	<4.23	<4.10
Sodium	25.0		141 JB	87.5 JB	65.6 JB	103 JB
Thallium	25.0		<21.7	<22.6	<21.2	<20.5
Vanadium	5.00		11.0	10.1	10.5	10.7
Zinc	1.00		21.2 J	34.6	44.3	87.4 J
ARSENIC TOTAL BY GFAA/SW 7050 (mg/kg)						
Arsenic	0.500		0.844	1.08 JH	1.73	2.94 J
LEAD TOTAL BY GFAA/SW 7421 (mg/kg)						
Lead	0.500		9.09	8.57	22.9	86.0 J
MERCURY TOTAL BY CVA/SW 7471 (mg/kg)						
Mercury	0.270		<0.266	<0.254	<0.300	<0.274
SELENIUM TOTAL BY GFAA/SW 7740/METHOD (mg/kg)						
Selenium	0.500		<0.432	0.458 JQ	<0.412	<0.453
ORGANOCHLORINE PESTICIDES AND PCBs - SW8060/SW3650 (mg/kg)						
4,4'-DDD	0.00333		<0.00408	0.000886 JQ	<0.00408	0.0342 J
4,4'-DDE	0.00133		<0.00163	<0.00162	<0.00163	0.143 J
4,4'-DDT	0.00333		<0.00408	<0.00405	<0.00408	0.176 J
AR1016	0.0333		<0.0408	<0.0405	<0.0408	<0.0397
AR1221	0.0333		<0.0408	<0.0405	<0.0408	<0.0397
AR1232	0.0333		<0.0408	<0.0405	<0.0408	<0.0397
AR1242	0.0333		<0.0408	<0.0405	<0.0408	<0.0397
AR1248	0.0333		<0.0408	<0.0405	<0.0408	<0.0397
AR1254	0.0333		<0.0408	<0.0405	<0.0408	<0.0397

TABLE C-2

DATA SUMMARY TABLE

Grooved Metalenecco Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID :			OT3926SA 24-OCT-95 0.0' - 2.0'	OT3927SA 24-OCT-95 0.0' - 2.0'	OT3928SA 24-OCT-95 0.0' - 2.0'
		Sample Date :	Depth :	Notes :			
				Duplicate of OT3925SA			
ORGANOCHLORINE PESTICIDES AND PCBS - SW9800/SW3558 (mg/kg) conc'd							
AR1260	0.0333						
Aldrin	0.00133	<0.0408			<0.0405	<0.0408	<0.0397
Chlordane	0.0166	<0.00163			<0.00162	<0.00163	<0.00159
Dieldrin	0.000666	<0.0204			<0.0202	<0.0204	0.0773 J
Endosulfan I	0.00166	<0.00816			0.00331	<0.00816	<0.000794
Endosulfan II	0.00133	<0.00204			<0.00202	<0.00204	<0.00198
Endosulfan sulfate	0.00333	<0.00163			<0.00162	<0.00163	<0.00159
Endrin	0.00200	<0.00408			<0.00405	<0.00408	<0.00397
Endrin aldehyde	0.00333	<0.00245			<0.00243	<0.00245	<0.00238
Heptachlor	0.000999	<0.00408			<0.00405	<0.00408	<0.00397
Heptachlor epoxide	0.00166	<0.00122			<0.00122	<0.00122	<0.00119
Methoxychlor	0.0166	<0.00204			<0.00202	<0.00204	<0.00198
Toxaphene	0.0666	<0.0204			<0.0202	<0.0204	<0.0198
alpha-BHC	0.000999	<0.0816			<0.0810	<0.0816	<0.0794
beta-BHC	0.00166	<0.00122			<0.00122	<0.00122	<0.00119
delta-BHC	0.00166	<0.00204			<0.00202	<0.00204	<0.00198
gamma-BHC (Lindane)	0.00133	<0.00204			<0.00202	<0.00204	<0.00198
		<0.00163			<0.00162	<0.00163	<0.00159
% Spillage Recovery (Control Limit)							
sur-Dibutylchlorides R% (10 - 181)	-	62.0			48.0	57.1	62.0
sur-TCMX R% (18 - 145)	-	-			-	-	-
CHLORINATED HERBICIDES - SW9150/METHOD (mg/kg)							
2,4,5-T	0.00400	<0.00494			<0.00486	<0.00492	<0.00480
2,4,5-TP (Silvex)	0.00400	<0.00494			<0.00486	<0.00492	<0.00480
2,4-D	0.0400	<0.0494			<0.0486	<0.0492	<0.0480
2,4-DB	0.0600	<0.0741			<0.0729	<0.0738	<0.0720
Delapron	0.140	<0.173			<0.170	<0.172	<0.168
Dicamba	0.00400	<0.00494			<0.00486	<0.00492	<0.00480
Dichloroprop	0.0400	<0.0494			<0.0486	<0.0492 J	<0.0480
Dinoseb	0.0140	<0.0173			<0.0170	<0.0172	<0.0168
MCPA	3.00	<3.70			<3.64	<3.69	<3.60
MCPP	3.00	<3.70			<3.64	<3.69	<3.60
		40.0			40.9	41.9	38.0
% Spillage Recovery (Control Limit)							
sur-DCAA R% (0 - 191)	-	-			-	-	-
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW9240/NONE (mg/kg)							
1,1,1-Trichloroethane	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,1,2,2-Tetrachloroethane	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,1,2-Trichloroethane	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,1-Dichloroethane	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,1-Dichloroethene	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,2-Dichloroethane	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
1,2-Dichloropropene	0.00500	<0.00594			<0.00592	<0.00620	<0.00596
2-Butanone (MEK)	0.0100	<0.0119			<0.0118	<0.0124	<0.0119
2-Chloroethyl vinyl ether	0.0100	<0.0119			<0.0118	<0.0124	<0.0119
2-Hexanone	0.0100	<0.0119 J			<0.0118	<0.0124 J	<0.0119 J
4-Methyl-2-pentanone	0.0100	<0.0119			<0.0118	<0.0124	<0.0119

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID: Sample Date: Depth: Notes:	FDUP08 24-OCT-95 0.0' - 2.0' Duplicate of OT39255A	OT39265A 24-OCT-95 0.0' - 2.0'	OT39275A 24-OCT-95 0.0' - 2.0'	OT39285A 24-OCT-95 0.0' - 2.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (method cont'd)						
Acetone	0.0100					
Benzene	0.00500		<0.0119	<0.0118	<0.0124	<0.0119
Bromodichloromethane	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Bromoform	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Bromomethane	0.0100		<0.0119	<0.0118	<0.0124	<0.0119
Carbon disulfide	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Carbon tetrachloride	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Chlorobenzene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Chloroethane	0.0100		<0.0119	<0.0118	<0.0124	<0.0119
Chloroform	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Chloromethane	0.0100		<0.0119	<0.0118	<0.0124	<0.0119
Dibromodichloromethane	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Ethylbenzene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Methylene chloride	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Styrene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Tetrachloroethene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Toluene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Trichloroethene	0.0100		<0.0119	<0.0118	<0.0124	<0.0119
Vinyl acetate	0.0100		<0.0119	<0.0118	<0.0124	<0.0119
Vinyl chloride	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
Xylenes (total)	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
cis-1,2-Dichloroethene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
trans-1,2-Dichloroethene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
trans-1,3-Dichloropropene	0.00500		<0.00594	<0.00592	<0.00620	<0.00596
% Spiked Recoveries (Control Limit)						
sur-1,2-Dichloroethene-d4 R% (70 - 121)	-		112.0	112.0	111.9	107.1
sur-Bromofluorobenzene R% (74 - 121)	-		89.1	89.0	92.9	90.1
sur-Toluene-d8 R% (81 - 117)	-		102.0	97.0	100.0	98.0
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8260/SW3550 (method)						
1,2,4-Trichlorobenzene	0.333		<0.410	<0.405	<0.407	<0.397
1,2-Dichlorobenzene	0.333		<0.410	<0.405	<0.407	<0.397
1,3-Dichlorobenzene	0.333		<0.410	<0.405	<0.407	<0.397
1,4-Dichlorobenzene	0.333		<0.410	<0.405	<0.407	<0.397
2,4,5-Trichlorophenol	0.667		<0.821	<0.810	<0.814	<0.794
2,4,6-Trichlorophenol	0.333		<0.410	<0.405	<0.407	<0.397
2,4-Dichlorophenol	0.333		<0.410	<0.405	<0.407	<0.397
2,4-Dimethylphenol	0.333		<0.410	<0.405	<0.407	<0.397
2,4-Dinitrophenol	1.67		<2.05	<2.02	<2.03	<1.98
2,4-Dinitrotoluene	0.333		<0.410	<0.405	<0.407	<0.397
2,6-Dinitrotoluene	0.333		<0.410	<0.405	<0.407	<0.397
2-Chloronaphthalene	0.333		<0.410	<0.405	<0.407	<0.397
2-Chlorophenol	0.333		<0.410	<0.405	<0.407	<0.397
2-Methylnaphthalene	0.333		<0.410	<0.405	<0.407	<0.397
2-Methylphenol	0.333		<0.410	<0.405	<0.407	<0.397
2-Nitroaniline	1.67		<2.05	<2.02	<2.03	<1.98
2-Nitrophenol	0.333		<0.410	<0.405	<0.407	<0.397

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)							
Sample ID :	FDUP08						
Sample Date :	24-OCT-95						
Depth :	0.0' - 2.0'						
Note :	Duplicate of OT3925SA						
Quantitation							
Limits							
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg soil)							
3,3'-Dibromobenzidine	0.667						
3-Nitroaniline	1.67	<0.821	<0.810	<0.814	<0.794		
4,6-Dinitro-2-methylphenol	1.67	<2.05	<2.02	<2.03	<1.98		
4-Bromophenyl phenyl ether	0.333	<2.05	<2.02	<2.03	<1.98		
4-Chloro-3-methylphenol	0.333	<0.410	<0.405	<0.407	<0.397		
4-Chloroaniline	0.667	<0.410	<0.405	<0.407	<0.397		
4-Chlorophenyl phenyl ether	0.333	<0.821	<0.810	<0.814	<0.794		
4-Methylphenol	0.333	<0.410	<0.405	<0.407	<0.397		
4-Nitroaniline	1.67	<2.05	<2.02	<2.03	<1.98		
4-Nitrophenol	1.67	<2.05	<2.02	<2.03	<1.98		
Acenaphthene	0.333	<0.410	<0.405	<0.407	<0.397		
Acenaphthylene	0.333	<0.410	<0.405	<0.407	<0.397		
Anthracene	0.333	<0.410	<0.405	<0.407	<0.397		
Benz(a)anthracene	0.333	<0.410	<0.405	<0.407	<0.397		
Benz(a)pyrene	0.333	<0.410	<0.405	<0.407	0.0445	IQ	
Benz(b)fluoranthene	0.333	<0.410	<0.405	<0.407	0.0433	J	
Benz(c,h,i)perylene	0.333	<0.410	<0.405	0.0375	0.0659	J	
Benz(k)fluoranthene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Benzoic acid	0.333	<0.410	<0.405	<0.407	<0.397	J	
Benzyl alcohol	1.67	<2.05	<2.02	<2.03	<1.98		
Benzyl benzyl phthalate	0.667	<0.821	<0.810	<0.814	<0.794		
Chrysene	0.333	<0.410	<0.405	<0.407	<0.397		
Di-n-butylphthalate	0.333	<0.410	<0.405	0.0243	0.0651	IQ	
Di-n-octylphthalate	0.333	<0.410	<0.405	<0.407	<0.397	J	
Dibenz(a,h)anthracene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Dibenzofuran	0.333	<0.410	<0.405	<0.407	<0.397	J	
Diethylphthalate	0.333	<0.410	<0.405	<0.407	<0.397	J	
Dimethylphthalate	0.333	<0.410	<0.405	<0.407	<0.397	J	
Fluorene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Hexachlorobenzene	0.333	<0.410	<0.405	<0.407	0.0873	IQ	
Hexachlorobutadiene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Hexachlorocyclopentadiene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Hexachloroethane	0.333	<0.410	<0.405	<0.407	<0.397	J	
Indeno(1,2,3-cd)pyrene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Isophorone	0.333	<0.410	<0.405	<0.407	<0.397	J	
Naphthalene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Nitrobenzene	0.333	<0.410	<0.405	<0.407	<0.397	J	
Pentachlorophenol	1.00	<1.23	<1.22	<1.22	<1.19		
Phenanthrene	0.333	<0.410	<0.405	<0.407	0.0368	IQ	
Phenol	0.333	<0.410	<0.405	<0.407	<0.397	J	

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID : Sample Date : Depth : Notes :	FDUP08 24-OCT-95 0.0' - 2.0' Duplicate of OT3925SA	OT3926SA 24-OCT-95 0.0' - 2.0'	OT3927SA 24-OCT-95 0.0' - 2.0'	OT3928SA 24-OCT-95 0.0' - 2.0'
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW82.706W3559 (modified) conf'd						
Pyrene	0.333					
bis(2-Chloroethoxy)methane	0.333		<0.410 J	0.0474 J	0.0240 JQ	0.0961 JQ
bis(2-Chloroethyl)ether	0.333		<0.410	<0.405	<0.407	<0.397
bis(2-Chloroisopropyl)ether	0.333		<0.410	<0.405	<0.407	<0.397
bis(2-Ethylhexyl)phthalate	0.333		<0.410 J	<0.405 J	<0.407	<0.397
n-Nitrosodi-n-propylamine	0.333		<0.410	<0.405	<0.407	<0.397
n-Nitrosodiphenylamine	0.333		<0.410	<0.405	<0.407	<0.397
% Surrogate Recovery (Control Limits)						
sur-2,4,6-Trichlorophenol R% (19 - 122)	-		46.9	85.0	53.0	51.0
sur-2-Fluorobiphenyl R% (30 - 115)	-		59.0	90.9	54.1	58.9
sur-2-Fluorophenol R% (25 - 121)	-		39.9	74.0	38.0	40.9
sur-Nitrobenzene-d5 R% (23 - 120)	-		46.1	84.0	42.0	48.1
sur-Phenol-d6 R% (24 - 113)	-		39.9	70.0	38.0	45.0
sur-Terphenyl-d14 R% (18 - 137)	-		75.1	113.1	64.9	69.0

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data; do not use

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNITS)	Quantitation Limits	Sample ID Sample Date: Depth: Notes:	FDUP07 24-OCT-95 0.0' - 2.0' Duplicate of OT3928SA	OT3929SA 24-OCT-95 0.0' - 2.0'	OT3930SA 24-OCT-95 0.0' - 2.0'
SOIL pH - SW9945/NONE (none)	-		7.54	7.62	7.51
623-9045 pH units Soil	-				
PERCENT SOLID - D2216 /NONE (percent)	-		12.0	18.0	19.0
623-D2216 Moisture	-				
METALS, TOTAL BY ICP/SW6010/SW3450 (mg/kg)					
Aluminum	50.0		6420	10700	9150
Antimony	25.0		1.81 IQ	1.92 IQ	2.04 JL
Barium	2.00		106	123	100
Beryllium	0.300		<2.47	0.610	0.742
Cadmium	1.00		<0.824	<0.871	<0.928 JL
Calcium	10.0		127000	77100	23000
Chromium	5.00		14.0 IQ	10.3	9.56
Cobalt	5.00		2.64 IQ	3.75 IQ	4.08 IQ
Copper	5.00		10.7 IQ	9.84	9.47
Iron	5.00		6490 J	7590	7480
Magnesium	25.0		1870	3140	2380
Manganese	1.00		359	322	397
Molybdenum	5.00		2.06 IQ	2.26 IQ	<4.64 JL
Nickel	5.00		59.3 J	8.88	8.44
Potassium	60.0		1560	2290	2000
Silver	5.00		<4.12	<4.36	<4.64
Sodium	25.0		89.5 JB	126 JB	216 JB
Thallium	25.0		<20.6	<21.8	<23.2
Vanadium	5.00		10.5	8.45	11.0
Zinc	1.00		60.0 J	18.4	18.6
ARSENIC, TOTAL BY GFAA/SW 7060 (mg/kg)					
Arsenic	0.500		15.4 JH	2.95	2.56 JL
LEAD, TOTAL BY GFAA/SW 7421 (mg/kg)					
Lead	0.500		15.9 J	8.02	10.0 J
MERCURY, TOTAL BY CVAA/SW 7471 (mg/kg)					
Mercury	0.270		<0.220	<0.266	<0.282
SELENIUM, TOTAL BY GFAA/SW 7740/METHOD (mg/kg)					
Selenium	0.500		0.410 IQ	<0.415	<0.468 JL
ORGANOCHLORINE PESTICIDES AND PCBs - SW9080/SW3450 (mg/kg)					
4,4'-DDD	0.00333		<0.00374 J	<0.00402	<0.00405
4,4'-DDE	0.00133		0.000986 IQ	<0.00161	<0.00162
4,4'-DDT	0.00333		<0.00374 J	<0.00402	<0.00405
AR101.6	0.0333		<0.0374	<0.0402	<0.0405
ARI 221	0.0333		<0.0374	<0.0402	<0.0405
ARI 232	0.0333		<0.0374	<0.0402	<0.0405
ARI 242	0.0333		<0.0374	<0.0402	<0.0405
ARI 248	0.0333		<0.0374	<0.0402	<0.0405
ARI 254	0.0333		<0.0374	<0.0402	<0.0405

TABLE C-1

DATA SUMMARY TABLE
Ground Maintenance Yard
Naval Air Station Fort Worth Joint Reserve Base, Carswell Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)		Sample ID :	FDUP07	OT3928SA	OT3930SA
Quantitation	Limits	Sample Date :	24-OCT-95	24-OCT-95	24-OCT-95
		Depth :	0.0' - 2.0'	0.0' - 2.0'	0.0' - 2.0'
		Notes :	Duplicate of OT3928SA		
ORGANOCHLORINE PESTICIDES AND PCBs - SW846/SW3559 (method cont'd)					
AR1260	0.0333		<0.0374	<0.0402	<0.0405
Aldrin	0.00133		<0.00150	<0.00161	<0.00162
Chlordane	0.0166		0.0375 J	<0.0201	0.0231
Dieldrin	0.000666		<0.000748	<0.000804	<0.000810
Endosulfan I	0.00166		<0.00187	<0.00201	<0.00202
Endosulfan II	0.00133		<0.00150	<0.00161	<0.00162
Endosulfan sulfate	0.00333		<0.00374	<0.00402	<0.00405
Endrin	0.00200		<0.00224	<0.00241	<0.00243
Endrin aldehyde	0.00333		<0.00374	<0.00402	<0.00405
Heptachlor	0.000999		<0.00112	<0.00121	<0.00122
Heptachlor epoxide	0.00166		<0.00187	<0.00201	<0.00202
Methoxychlor	0.0166		0.0129 IB	<0.0201	<0.0202
Toxaphene	0.0666		<0.0748	<0.0804	<0.0810
alpha-BHC	0.000999		<0.00112	<0.00121	<0.00122
beta-BHC	0.00166		<0.00187	<0.00201	<0.00202
delta-BHC	0.00166		<0.00187	<0.00201	<0.00202
gamma-BHC (Lindane)	0.00133		<0.00150	<0.00161	<0.00162
% Surrogate Recovery (Control Limit)					
sur-Dibutylchloride R% (10 - 181)	-	51.9	-	46.0	16.0
sur-TCMX R% (18 - 145)	-	-	-	-	64.0
CHLORINATED HERBICIDES - SW846/METHOD (method)					
2,4,5-T	0.00400		<0.00454	<0.00488	<0.00490
2,4,5-TP (Silvex)	0.00400		<0.00454	<0.00488	<0.00490
2,4-D	0.0400		<0.0454	<0.0488	<0.0490
2,4-DB	0.0600		<0.0681	<0.0732	<0.0735
Delapron	0.140		<0.159	<0.171	<0.172
Dicamba	0.00400		<0.00454	<0.00488	<0.00490
Dichloroprop	0.0400		<0.0454	<0.0488	<0.0490 J
Dimoseb	0.0140		<0.0159	<0.0171	<0.0172
MCPA	3.00		<3.40	<3.66	<3.68
MCTP	3.00		<3.40	<3.66	<3.68
% Surrogate Recovery (Control Limit)					
sur-DCAA R% (0 - 191)	-	42.0	-	48.0	44.9
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW846/NONE (method)					
1,1,1,1,1-Trichloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,1,1,2,2-Tetrachloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,1,1,2-Trichloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,1,1-Dichloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,1,2-Dichloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,2-Dichloroethane	0.00500		<0.00608	<0.00628	<0.00621
1,2-Dichloropropane	0.00500		<0.00608	<0.00628	<0.00621
2-Butanone (MEK)	0.0100		<0.0122	<0.0126	<0.0124
2-Chloroethyl vinyl ether	0.0100		<0.0122	<0.0126	<0.0124
2-Hexanone	0.0100		<0.0122 J	<0.0126 J	<0.0124 J
4-Methyl-2-pentanone	0.0100		<0.0122	<0.0126	<0.0124

TABLE C-2

DATA SUMMARY TABLE
 Ground Maintenance Yard
 Naval Air Station Fort Worth Jett Reserve Base, Carswell Field
 Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Sample ID		Quantitation Limits	Notes	Sample Date		Depth	Notes
	FDUP07	OT3928SA			24-OCT-95	OT3928SA		
					0.0' - 2.0'	0.0' - 2.0'		OT3930SA 24-OCT-95 0.0' - 2.0'
VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8240/NONE (mg/kg) cont'd								
Acetone	<0.0122	<0.0126	0.0100					<0.0124
Benzene	<0.00500	<0.00628	0.00500					<0.00621
Bromodichloromethane	<0.00500	<0.00628	0.00500					<0.00621
Bromoform	<0.00500	<0.00628	0.00500					<0.00621
Bromomethane	<0.0100	<0.0122	0.0100					<0.0124
Carbon disulfide	<0.00500	<0.00628	0.00500					<0.00621
Carbon tetrachloride	<0.00500	<0.00628	0.00500					<0.00621
Chlorobenzene	<0.00500	<0.00628	0.00500					<0.00621
Chloroethane	<0.0100	<0.0122	0.0100					<0.0124
Chloroform	<0.00500	<0.00628	0.00500					<0.00621
Chloromethane	<0.0100	<0.0122	0.0100					<0.0124
Dibromochloromethane	<0.00500	<0.00628	0.00500					<0.00621
Ethylbenzene	<0.00500	<0.00628	0.00500					<0.00621
Methylene chloride	<0.00500	<0.00628	0.00500					<0.00621
Styrene	<0.00500	<0.00628	0.00500					<0.00621
Tetrachloroethene	<0.00500	<0.00628	0.00500					<0.00621
Toluene	<0.00500	<0.00628	0.00500					0.00358 IQ
Trichloroethene	<0.00500	<0.00628	0.00500					0.00230 IQ
Vinyl acetate	<0.00500	<0.00628	0.00500					<0.00621
Vinyl chloride	<0.0122	<0.0126	0.0100					<0.0124 J
Xylenes (total)	<0.00500	<0.00628	0.00500					<0.00621
cis-1,2-Dichloroethene	<0.00500	<0.00628	0.00500					<0.00621
cis-1,3-Dichloropropene	<0.00500	<0.00628	0.00500					<0.00621
trans-1,2-Dichloroethene	<0.00500	<0.00628	0.00500					<0.00621
trans-1,3-Dichloropropene	<0.00500	<0.00628	0.00500					<0.00621
% Serrazale Recovery (Control Limit)								
sur-1,2-Dichloroethene-44 R% (70 - 121)	109.0	112.1	-					105.0
sur-Bromofluorobenzene R% (74 - 121)	89.0	91.1	-					87.0
sur-Toluene-28 R% (81 - 117)	102.0	99.0	-					100.0
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3550 (mg/kg)								
1,2,4-Trichlorobenzene	<0.373	<0.403	0.333					<0.406
1,2-Dichlorobenzene	<0.373	<0.403	0.333					<0.406
1,3-Dichlorobenzene	<0.373	<0.403	0.333					<0.406
1,4-Dichlorobenzene	<0.373	<0.403	0.333					<0.406
2,4,5-Trichlorophenol	<0.746	<0.806	0.667					<0.812
2,4,6-Trichlorophenol	<0.373	<0.403	0.333					<0.406
2,4-Dichlorophenol	<0.373	<0.403	0.333					<0.406
2,4-Dimethylphenol	<0.373	<0.403	0.333					<0.406
2,4-Dinitrophenol	<1.87	<2.02	1.67					<2.03 J
2,4-Dinitrotoluene	<0.373	<0.403	0.333					<0.406
2,6-Dinitrotoluene	<0.373	<0.403	0.333					<0.406
2-Chloronaphthalene	<0.373	<0.403	0.333					<0.406
2-Chlorophenol	<0.373	<0.403	0.333					<0.406
2-Methylnaphthalene	<0.373	<0.403	0.333					<0.406
2-Methylphenol	<0.373	<0.403	0.333					<0.406
2-Nitroaniline	<1.87	<2.02	1.67					<2.03
2-Nitrophenol	<0.373	<0.403	0.333					<0.406

TABLE C-2

DATA SUMMARY TABLE

Ground Maintenance Yard
Naval Air Station Fort Worth Joliet Reserve Base, Carroll Field
Fort Worth, Texas

PARAMETER/METHOD(UNIT)	Quantitation Limits	Sample ID:		OT3926SA 24-OCT-95 0.0' - 2.0'	OT3927SA 24-OCT-95 0.0' - 2.0'	OT3928SA 24-OCT-95 0.0' - 2.0'
		FDUP08	24-OCT-95			
		Depth:	0.0' - 2.0'			
		Notes:	Duplicate of OT3925SA			
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS - SW8270/SW3450 (mg/kg soil)						
Pyrene	0.333					
bis(2-Chloroethoxy)methane	0.333	<0.410 J		0.0474 J	0.0240 JQ	0.0961 JQ
bis(2-Chloroethyl)ether	0.333	<0.410		<0.405	<0.407	<0.397
bis(2-Chloroisopropyl)ether	0.333	<0.410		<0.405	<0.407	<0.397
bis(2-Ethylhexyl)phthalate	0.333	<0.410 J		<0.405 J	<0.407	<0.397
n-Nitrosodi-n-propylamine	0.333	<0.410		<0.405	<0.407	<0.397
n-Nitrosodiphenylamine	0.333	<0.410		<0.405	<0.407	<0.397
% Surrogate Recovery (Control Limit)						
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	46.9		85.0	53.0	51.0
sur-2-Fluorobiphenyl R% (30 - 115)	-	39.9		90.9	54.1	58.9
sur-2-Fluorophenol R% (25 - 121)	-	46.1		74.0	38.0	40.9
sur-Nitrobenzene-d8 R% (23 - 120)	-	39.9		84.0	42.0	48.1
sur-Phenol-d6 R% (24 - 113)	-	75.1		70.0	38.0	45.0
sur-Terphenyl-d14 R% (18 - 137)	-			113.1	64.9	69.0

Data Qualification Flags/Notes:

J = Estimated quantitation based upon QC data
JB = Estimated quantitation: possibly biased high or a false positive based upon blank data
JH = Estimated quantitation: possibly biased high based upon QC data
JL = Estimated quantitation: possibly biased low or a false negative based upon QC data
JQ = Estimated quantitation: detected below the Practical Quantitation Limit
R = Datum rejected based upon QC data; do not use.

DATA SUMMARY TABLE

Graysen Middlesex Yard
Naval Air Station Fort Worth, Texas, Continued Field
Fort Worth, Texas

PARAMETER/CONTAMINANTS		Sample ID:	FDUP#:	OT3928SA	OT3928SA
		Sample Date:	24-OCT-95	24-OCT-95	24-OCT-95
		Depth:	0' - 2'	0' - 2'	0' - 2'
		Notes:	Duplicate of OT3928SA		
SEMI-VOLATILE ORGANIC COMPOUNDS - SWITZERLAND (cont'd) (cont'd)					
Pyrene	0.333	0.0270	I	<0.403	<0.406
ben(2-Chlorophenyl)pyrene	0.333	<0.373		<0.403	<0.406
ben(2-Chlorophenyl)ether	0.333	<0.373		<0.403	<0.406
ben(2-Chlorophenyl)ether	0.333	<0.373		<0.403	<0.406
ben(2-Ethylhexyl)pythalate	0.333	<0.373	I	<0.403	0.309 IQ
n-Nitrosod-n-propylamine	0.333	<0.373		<0.403	<0.406
n-Nitrosodiphenylamine	0.333	<0.373		<0.403	<0.406
% Surrogate Recovery (Control Limits)					
sur-2,4,6-Trichlorophenol R% (19 - 122)	-	57.0		56.0	64.0
sur-2-Fluorobiphenyl R% (30 - 115)	-	67.0		67.0	73.9
sur-2-Phenophenol R% (25 - 121)	-	48.0		48.9	58.9
sur-Nitrobenzamide R% (23 - 120)	-	49.1		54.1	63.1
sur-Phenyl-2,4,6-Trichlorophenol R% (24 - 113)	-	48.9		48.9	58.0
sur-Terphenyl R% (18 - 137)	-	82.0		68.0	70.9

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J = Estimated quantifier based upon QC data.
 J₀ = Estimated quantification; possibly biased high or a false positive based upon QC data.
 J₁ = Estimated quantification; possibly biased high based upon QC data.
 J₂ = Estimated quantification; possibly biased low or a false negative based upon QC data.
 J₃ = Estimated quantification; detected below the Practical Quantification Limit.
 J₄ = Estimated quantification based upon QC data; do not use.

PREPARED/DATED: John Pecore/2-22-96
CHECKED/DATED: Sue Mac/2-22-96

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